

CCCCCCCC	IIIIII	RRRRRRR	EEEEEEEE	000000	PPPPPPP	
CCCCCCCC	IIIIII	RRRRRRR	EEEEEEEE	000000	PPPPPPP	
CC	II	RR RR	EE	00 00	PP PP	
CC	II	RR RR	EE	00 00	PP PP	
CC	II	RR RR	EE	00 00	PP PP	
CC	II	RR RR	EE	00 00	PP PP	
CC	II	RRRRRRR	EEEEEEEE	00 00	PPPPPPP	
CC	II	RRRRRRR	EEEEEEEE	00 00	PPPPPPP	
CC	II	RR RR	EE	00 00	PP	
CC	II	RR RR	EE	00 00	PP	
CC	II	RR RR	EE	00 00	PP	
CC	II	RR RR	EE	00 00	PP	
CC	II	RR RR	EE	00 00	PP	
CCCCCCCC	IIIIII	RR RR	EEEEEEEE	000000	PP	....
CCCCCCCC	IIIIII	RR RR	EEEEEEEE	000000	PP	....

LL	SSSSSSS	TTTTTTTT
LL	SSSSSSS	TTTTTTTT
LL	SS	TT
LL	SS	TT
LL	SS	TT
LL	SS	TT
LL	SSSSSS	TT
LL	SSSSSS	TT
LL	SS	TT
LL	SS	TT
LL	SS	TT
LL	SS	TT
LL	SS	TT
LLLLLLLLLL	SSSSSSS	TT
LLLLLLLLLL	SSSSSSS	TT

CIREOP      CREATED BY    MACRO    ON 29-JUN-85 AT 12:18      PAGE 2      B 2

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
LF.TIM	= 000010	#5-64
LF.UNL	= 020000	#5-64
LF.X2P	= 000000	#5-64
LN.CLO	= 000000	#5-64
LN.DUM	= 000005	#5-64
LN.LOA	= 000004	#5-64
LN.LOO	= 000003	#5-64
LN.OAU	= 000003	#5-64
LN.OFF	= 000001	#5-64
LN.ON	= 000000	#5-64
LN.OOP	= 000004	#5-64
LN.OPE	= 000001	#5-64
LN.REF	= 000002	#5-64
LN.SER	= 000002	#5-64
LN.STA	= 000017	#5-64
LN.SUB	= 000360	#5-64
LN.TRI	= 000006	#5-64
LP\$MPT	= 000010	#5-61      8-191
LP\$MUX	= 000004	#5-61
LP\$TRB	= 000002	#5-61      8-190      8-193      8-207
LP\$UNT	= 000001	#5-61
LP\$WCN	= 000040	#5-61      5-61
LP\$WDV	= 000020	#5-61      5-61
LP\$WLD	= 000360	#5-61
LP\$WTR	= 000200	#5-61      5-61
LP\$WUN	= 000100	#5-61      5-61
L\$ADJ	000110	#5-61
L\$BUF	000060	#5-61      *7-106      7-107      7-139      7-145      7-152      7-158
L\$CHN	000054	#5-61
L\$COU	000114	#5-61
L\$CTB	000053	#5-61
L\$CTL	000002	#5-61
L\$DDM	000000	#5-61
L\$FLG	000064	#5-61      7-109      7-141      *7-163
L\$FLX	000070	#5-61
L\$LEN	000124	#5-61
L\$LTM	000070	#5-61
L\$MSG	000056	#5-61
L\$MTYP	000067	#5-61
L\$NAM	000000	#5-61
L\$NLEN	= 000020	#5-61      5-61      5-61
L\$NOD	000112	#5-61
L\$NXT	000044	#5-61
L\$OPT	000062	#5-61      7-132
L\$PAR	000120	#5-61
L\$PDV	000055	#5-61
L\$PFG	000041	#5-61      *8-190      8-191      *8-193      8-207
L\$PLB	000116	#5-61
L\$PRO	000067	#5-61
L\$PVC	000004	#5-61
L\$SCN	000020	#5-61
L\$SFR	000072	#5-61

```

334 .SBTTL GETADJ - Get an adjacency
335
336 *
337 ** Getadj - Get an adjacency
338
339 Inputs:    L$ADJ(R4) = current position in adjacency database
340            L$COU(R4) = count of unscanned entries in adjacency database
341            L$CHN(R4) = channel number of circuit
342
343 Output:    carry set:    no more adjacent nodes.
344            carry clear:  success
345
346            L$NOD(R4) = adjacent node address
347            L$TSZ(R4) = transport block size
348
349
350 All registers are preserved.
351
352 GETADJ:
353 3WSTK$ 40$                ;; enter system state
354 SAVMAP                    ;; save APR 6 mapping
355 MOV #*RXPT,R2             ;; set up process id
356 CALL @PDVID              ;; get PDV index                ; RJK05
357 BCS 20$                  ;; if CS, return nothing        ; ** -1
358 ADD @PDVTA,R2            ;; point to PDV address          ; RJK05
359 MOV (R2),R2              ;; point to PDV
360 TST Z,DSP(R2)            ;; process resident ?
361 BEQ 20$                  ;; if EQ, no process
362 MOV Z,DAT(R2),R2         ;; point to transport database
363 BEQ 10$                  ;; br if transport not loaded
364 MAP N$ADJ1(R2)           ;; map to adjacency database
365
366 10$: TST L$COU(R4)        ;; any unscanned adjacencies ?
367 BLOS 20$                ;; if LOS, no
368 MOV L$ADJ(R4),R5        ;; else get next adjacency
369 ADD #A$LEN,L$ADJ(R4)    ;; advance pointer
370 DEC L$COU(R4)           ;; change unscanned count
371
372 BITB #*AT$UP,A$TYP(R5)  ;; is this adjacency up ?
373 BEQ 10$                 ;; if EQ, no
374 CMPB A$CIR(R5),L$CHN(R4) ;; is it for correct channel ?
375 BNE 10$                 ;; if NE, keep walking
376
377 MOV A$NID(R5),L$NOD(R4)  ;; else get node address
378 MAP N$ADJ2(R2)          ;; map to ADJ2 database
379 MOV A$TSZ(R5),L$TSZ(R4) ;; get block size
380 BR 30$                  ;; and return success
381
382 20$: RETC R0             ;; return failure
383
384 30$: RESMAP              ;; restore mapping
385 40$: RETURN              ;; back to user state and caller

```

CIREST      CREATED BY MACRO ON 25-JUL-85 AT 15:36      PAGE 2      B 4

SYMBOL CROSS REFERENCE      CREF      04.00

SYMBOL	VALUE	REFERENCES
LF.ACT	= 100000	#5-67
LF.BRO	= 000400	#5-67
LF.BWT	= 000307	#5-67
LF.ENA	= 002000	#5-67
LF.LPB	= 001000	#5-67      7-221
LF.MDC	= 000100	#5-67
LF.MFL	= 004000	#5-67
LF.MTP	= 000020	#5-67
LF.PAC	= 000200	#5-67
LF.RDY	= 040000	#5-67      7-175
LF.REA	= 010000	#5-67
LF.SER	= 000040	#5-67
LF.TIM	= 000010	#5-67
LF.UNL	= 020000	#5-67
LF.X2P	= 000000	#5-67
LN.CLO	= 000000	#5-67
LN.DUM	= 000005	#5-67
LN.LOA	= 000004	#5-67
LN.LOO	= 000003	#5-67
LN.OAU	= 000003	#5-67
LN.OFF	= 000001	#5-67
LN.ON	= 000000	#5-67
LN.OOP	= 000004	#5-67
LN.OPE	= 000001	#5-67
LN.REF	= 000002	#5-67
LN.SER	= 000002	#5-67
LN.STA	= 000017	#5-67
LN.SUB	= 000360	#5-67
LN.TRI	= 000006	#5-67
LP\$MPT	= 000010	#5-73
LP\$MUX	= 000004	#5-73
LP\$TRB	= 000002	#5-73
LP\$UNT	= 000001	#5-73
LP\$WCN	= 000040	#5-73      5-73
LP\$WDV	= 000020	#5-73      5-73
LP\$WLD	= 000360	#5-73
LP\$WTR	= 000200	#5-73      5-73
LP\$WUN	= 000100	#5-73      5-73
L\$ADJ	000110	#5-73      *7-251      *7-270      9-367      *9-368
L\$BUF	000060	#5-73      7-283
L\$CHN	000054	#5-73      7-228      9-373      12-517      13-567
L\$COU	000114	#5-73      *7-250      *7-265      *7-266      9-365      *9-369
L\$CTB	000053	#5-73
L\$CTL	000002	#5-73
L\$DDM	000000	#5-73
L\$FLG	000064	#5-73      7-161      7-245      *7-277      *7-282
L\$FLX	000070	#5-73
L\$LEN	000124	#5-73
L\$LTN	000070	#5-73
L\$MSG	000056	#5-73
L\$MTYP	000067	#5-73
L\$NAM	000000	#5-73

```

137
138
139
140 000170 010066 000004      20$: MOV      R0,2+RBIAS(SP)      ;; ELSE, RETURN ERROR CODE IN R0
141 000174                                RETC      R0              ;; RETURN CARRY TO USER
142 000206 000403                                BR      40$              ;; AND RETURN
143 000210 116461 000103 000034 30$: MOV      R0,D(R4),S.STPN(R1)  ;; SET THE NEW TRIB ADDRESS
144 000216                                RESMAP              ;; RESTORE PREVIOUS MAPPING
145 000222                                RETURN              ;; BACK TO USER STATE
146
147 000224 000261      70$: SEC
148 000226      80$: RETURN      ; ...
  
```

## SYMBOL CROSS REFERENCE

CREF 04.00

SYMBOL	VALUE	REFERENCES
S.XMB	000030	#5-66
S.XMP	000024	#5-66
TF.FFE	= 000004	#5-66
TF.ROF	= 000001	#5-66
TF.RTO	= 000002	#5-66
TF.TAE	= 000010	#5-66
TF.TOF	= 000004	#5-66
TF.TTO	= 000010	#5-66
TF.URE	= 000001	#5-66
TF.USA	= 000002	#5-66
TR.ALF	000102	#5-66
TR.DEV	000100	#5-66
TR.LEN	= 000210	#5-66
TR.MST	000074	#5-66
TR.PRE	000076	#5-66
TR.TLZ	000072	#5-66
TX.NXM	000002	#5-66
TX.OVR	= 000001	#5-66
TX.TMO	= 000004	#5-66
T.ACT	000031	#5-66
T.CHA	000032	#5-66
T.CSR	000022	#5-66
T.ITM	000001	#5-66
T.QUE	000024	#5-66 5-66
T.QU2	= 000026	#5-66
T.RTY	000030	#5-66
T.TMR	000000	#5-66
T.TRPN	000004	*6-135
X\$MCB	= *****	5-63 5-63
ZF.COJ	= 001000	#5-63
ZF.DDM	= 000001	#5-63
ZF.DIA	= 004000	#5-63
ZF.DLC	= 000002	#5-63
ZF.D.P	= 100000	#5-63
ZF.INI	= 040000	#5-63
ZF.KMX	= 000020	#5-63
ZF.LLC	= 000004	#5-63
ZF.LMC	= 000100	#5-63
ZF.MAN	= 020000	#5-63
ZF.MFL	= 000010	#5-63
ZF.MTM	= 000400	#5-63
ZF.MUX	= 000040	#5-63
ZF.PSE	= 002000	#5-63
ZF.SLI	= 010000	#5-63
ZF.TIM	= 000200	#5-63
ZF.X3P	= 000000	#5-63
ZS.ASN	= 100000	#5-63
ZS.BSY	= 140000	#5-63
Z.AVL	000014	#5-63
Z.DAT	000016	#5-63
Z.DSP	000000	#5-63 5-63
Z.FLG	000010	#5-63

A\$CHK= 000000	L\$DDT= 001000	L\$FLG 000054	L\$P11= 000001	MC\$NOP 001607
A\$CPS= 000000	L\$DEA= 000100	L\$FLX 000076	L\$11R= 000000	MC\$NOR 000000
A\$PRI= 000000	L\$DLM= 001004	L\$F1 000066	MB\$DIS 000001	MC\$NPF 001616
A\$TRP= 000000	L\$DLT= 002000	L\$F2 000070	MB\$ENA 000000	MC\$NPR 001630
CHKCR= ***** GX	L\$DTE= 000010	L\$HBT 000254	MB\$FUL 000002	MC\$NRT 001200
CIZEIN 000000RG	L\$SHB= 000400	L\$HTM 000226	MB\$MIX 000002	MC\$NRT 001166
C\$CKP= 000000	L\$SHM= 010000	L\$INA 000125	MB\$ONE 000001	MC\$NVR 001642
C\$DRE= 000400	L\$SINA= 000010	L\$IND 000126	MB\$RXO 000001	MC\$P08 000000
C\$SRSH= 177564	L\$SIND= 000020	L\$INI 000127	MB\$TXO 000000	MC\$P11 000001
D\$BUG= 177514	L\$SINI= 000040	L\$LC7 000224	MB\$ZER 000000	MC\$RFL 002046
D\$ISK= 000000	L\$SLCT= 020000	L\$LEN 000264	MC\$BAB 006073	MC\$SBU 002051
D\$EL1= 000001	L\$SLMB= 000002	L\$LMB 000234	MC\$BID 001765	MC\$SFL 002044
D\$YNC= 000000	L\$SLDO= 040000	L\$LTM 000230	MC\$BMC 001767	MC\$SYC 000012
D\$YNM= 000000	L\$SMDT= 020000	L\$MRT 000253	MC\$BSC 001766	MC\$SYL 000036
E\$XPR= 000000	L\$SMRT= 000020	L\$MSG 000056	MC\$CAC 001442	MC\$SYR 000050
F\$LVL= 000001	L\$SMWN= 000040	L\$MTYP 000075	MC\$CAP 001440	MC\$SYS 000024
G\$TPP= 000000	L\$SMXB= 001000	L\$MWN 000252	MC\$CCL 001445	MC\$SYZ 000000
G\$TSS= 000000	L\$SMXR= 000020	L\$MXB 000133	MC\$CDC 002045	MC\$TBR 001140
G\$TTK= 000000	L\$SMXW= 000040	L\$MXR 000253	MC\$CDP 001441	MC\$TBS 001141
G\$WRD= 000000	L\$SNMT= 020000	L\$MXW 000252	MC\$CIF 001465	MC\$TDR 002053
I\$RAR= 000000	L\$SNOR= 100000	L\$NAM 000000	MC\$CLD 001464	MC\$TDM 000000
I\$RDN= 000000	L\$SNTI= 000200	L\$NLEN= 000020	MC\$COJ 100000	MC\$TYP 007777
K\$CNT= 177546	L\$SNTL= 000001	L\$NMT 000116	MC\$CTL 001454	MC\$UBU 002052
K\$CSR= 177546	L\$SNUM= 000100	L\$NTJ 000256	MC\$CTR 001452	MC\$UFD 002047
K\$LDL= 000000	L\$SDWN= 000010	L\$NTL 000134	MC\$CTS 001453	MC\$UMR 001132
K\$TPS= 000074	L\$SPLT= 004000	L\$NUM 000240	MC\$DDV 002050	MC\$UMS 001133
LC\$EXT 000000	L\$SPRO= 010000	L\$NUML 000236	MC\$LBR 001750	MC\$VAX 000003
LC\$INT 000001	L\$SPVC= 020053	L\$NXT 000044	MC\$LBS 001751	MC\$WID 060000
LC\$NTL= 000200	L\$SRET= 000200	L\$OPT 000062	MC\$LDI 001774	MC\$WIH 040000
LC\$OWN= 000400	L\$SSER= 100000	L\$OWN 000102	MC\$LDO 001775	MC\$WIL 020000
LD\$LP = 000000	L\$SSTA= 000002	L\$PAR 000072	MC\$LDR 001762	MC\$W08 020000
LF\$MLT= 040000	L\$SSVC= 000362	L\$PDV 000055	MC\$LDS 001763	MC\$W16 040000
LF\$FEA= 000001	L\$STAD= 000020	L\$PFG 000041	MC\$LLB 002021	MC\$W32 060000
LF\$SEG= 100000	L\$STH1= 000100	L\$PLT 000112	MC\$LLP 002115	MC\$XBR 001750
LF\$SKP= 000004	L\$STH2= 000200	L\$PRO 000075	MC\$LLR 002007	MC\$XBS 001751
LF\$VRZ= 000010	L\$STH3= 000400	L\$PVC 000004	MC\$LOD 000001	MC\$XCJ 000322
LF\$ZER= 000002	L\$SXTM= 040000	L\$RET 000256	MC\$LRB 002020	MC\$XCR 002260
LP\$MPT= 000010	L\$ACT 000104	L\$SCN 000020	MC\$LRP 002114	MC\$XCS 002261
LP\$MUX= 000004	L\$BBT 000114	L\$SCR 000166	MC\$LRR 002006	MC\$XDR 001762
LP\$NXC= 100000	L\$BLK 000262	L\$SER 000230	MC\$LSI 002032	MC\$XDS 001763
LP\$TRB= 000002	L\$BSA 000122	L\$LEN 000074	MC\$LST 002033	MC\$XFR 002272
LP\$UNT= 000001	L\$BSD 000123	L\$SLT 000042	MC\$SLUP 006072	MC\$XFS 002273
LP\$WCN= 000040	L\$BSI 000124	L\$SNM 000046	MC\$MAP 010000	MC\$XLJ 000323
LP\$WDV= 000020	L\$BUF 000060	L\$STA 000100	MC\$MBL 001764	MC\$XLR 002330
LP\$WLD= 000360	L\$CHN 000054	L\$TAD 000103	MC\$MBX 004420	MC\$XMA 000310
LP\$WTR= 000200	L\$CMB 000234	L\$TH1 000130	MC\$MBY 001752	MC\$XMC 002305
LP\$WUM= 000100	L\$COS 000101	L\$TH2 000131	MC\$MPX 004406	MC\$XMS 002304
L\$SACT= 000040	L\$CTB 000053	L\$TH3 000132	MC\$NAP 001604	MC\$XNR 002332
L\$SBBT= 010000	L\$CTL 000002	L\$TNM 000052	MC\$NBR 001130	MC\$XRC 002316
L\$SBLK= 001000	L\$CUS 000260	L\$TPT 000050	MC\$NBS 001131	MC\$XRR 002331
L\$SBSA= 000001	L\$DDM 000000	L\$TRB 000040	MC\$NCR 001151	MC\$XRS 002342
L\$SBSD= 000002	L\$DDT 000106	L\$TYP 000063	MC\$NCS 001155	MC\$O20 000002
L\$SBSI= 000004	L\$DEA 000105	L\$UNT 000003	MC\$NML 001274	MD\$CI 000007
L\$SCHN= 000001	L\$DLT 000110	L\$XCH 000232	MC\$NMR 001142	MD\$CNA 000003
L\$SCMB= 000002	L\$DTE 000240	L\$XMT 000120	MC\$NMS 001143	MD\$CDU 000001
L\$SCOS= 000004	L\$DTL 000236	L\$SASG= 000000	MC\$NNO 001606	MD\$DA 000010
L\$SCUS= 000004	L\$DTEP 000250	L\$SDRV= 000000	MC\$NNU 001605	MD\$DL 000004

CONTEXT AREA DEFINITIONS

000002	B\$7:	.BLKB	1	:	BASE TABLE + 7
000003	B\$10:	.BLKB	1	:	BASE TABLE + 10
000004	B\$11:	.BLKB	1	:	BASE TABLE + 11
000005	B\$12:	.BLKB	1	:	BASE TABLE + 12
000006	B\$7S10:	.BLKB	1	:	SUM OF BASE TABLE 7 AND 10
		.EVEN			
000000		.PSECT			



★★FILE★★ID★★DCPCOU

[illegible]

```

LL          SSSSSSSS  TTTTTTTTTT
LL          SSSSSSSS  TTTTTTTTTT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SSSSSS    TT
LL          SSSSSS    TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SSSSSSSS  TT
LLLLLLLLLL SSSSSSSS  TT
LLLLLLLLLL SSSSSSSS  TT

```

DCPCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:21      PAGE 1      B 10

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
BIT0	= 000001	#7-61      9-99      9-104      9-111      9-115      9-120      9-125      9-131
BIT1	= 000002	#7-61      9-100      9-105      9-112      9-116      9-121      9-126      9-132
BIT10	= 002000	#7-61
BIT11	= 004000	#7-61
BIT12	= 010000	#7-61      9-98      9-103      9-110      9-114      9-119      9-124      9-130
BIT13	= 020000	#7-61      9-87      9-88      9-94      9-95      9-96      9-97      9-98      9-103
		9-108      9-109      9-110      9-114      9-118      9-119      9-124      9-130
BIT14	= 040000	#7-61
BIT15	= 100000	#7-61      9-87      9-88      9-94      9-95      9-96      9-97      9-98      9-103
		9-108      9-109      9-110      9-114      9-118      9-119      9-124      9-130
BIT2	= 000004	#7-61
BIT3	= 000010	#7-61
BIT4	= 000020	#7-61
BIT5	= 000040	#7-61
BIT6	= 000100	#7-61
BIT7	= 000200	#7-61
BIT8	= 000400	#7-61
BIT9	= 001000	#7-61
B\$10	000003	#6-61
B\$11	000004	#6-61
B\$12	000005	#6-61
B\$5	000000	#6-61
B\$6	000001	#6-61
B\$7	000002	#6-61
B\$7S10	000006	#6-61
DCPCIR	000314	RG      #10-159
DCPCIO	000000	R      #9-87      10-169
DCPC11	000012	R      #9-94      10-170
DCPLIN	000312	RG      #10-156
DCPLNO	000004	R      #9-88      10-166      *10-177      10-180      *10-211
DCPLN1	000214	R      #9-124      10-167      *10-178      10-181      *10-210
FMTCOU	= *****	GX      10-201
FNDDCP	= *****	GX      10-164
KISAR6	= *****	GX      10-163      *10-212
LE.NRH	= 000200	9-134
LE.NRO	= 000001	9-125
LE.NSH	= 000002	9-126
LE.NSO	= 000020	9-131
LE.RCO	= 000040	9-132
LE.SAE	= 000004	9-127
LE.STT	= 000010	9-128
LE.XTU	= 000100	9-133
L\$END	= 000020	#7-61
L\$MLT	= 040000	#7-61
L\$REA	= 000001	#7-61
L\$SEG	= 100000	#7-61
L\$SIG	= 000040	#7-61
L\$SKP	= 000004	#7-61
L\$VR2	= 000010	#7-61      10-174      10-205
L\$ZER	= 000002	#7-61
LP\$MPT	= 000010	#7-61      10-190
LP\$MUX	= 000004	#7-61

\*\*FILE\*\*ID\*-DLCCOU

```

DDDDDDDD LL      CCCCCCCC CCCCCCCC 000000 UU      UU
DDDDDDDD LL      CCCCCCCC CCCCCCCC 000000 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DD DD LL      CC      CC      00      00 UU      UU
DDDDDDDD LLLLLLLLLL CCCCCCCC CCCCCCCC 000000 UUUUUUUUUU
DDDDDDDD L'' LLLLL CCCCCCCC CCCCCCCC 000000 UUUUUUUUUU

```

....  
....  
....

```

LL      SSSSSSSS TTTTTTTTTT
LL      SSSSSSSS TTTTTTTTTT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SSSSSS TT
LL      SSSSSS TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LLLLLLLLLL SSSSSSSS TT
LLLLLLLLLL SSSSSSSS TT

```

```

309          .SBTTL  GETXPT - get transport CIRCUIT counters
310
311      +
312      **GETXPT - get transport CIRCUIT counters
313
314      Inputs:      R3 = next free byte in buffer
315
316      Output:      If error, saved R0 = error code
317                  else
318                  R3 = next free byte in buffer
319
320      Actions:      Transport counters are inserted in response
321                  message after seconds since zeroed, before
322                  DLC counters.
323      -
324
325      GETXPT:
326      000732      SAVRG  <R5>          ;; save CCB address
327      000734      CLR    R2          ;; read/zero line/station counters
328      000736      005002 000002 000064  BIT  #LF$ZER,L$FLG(R4)  ;; zeroing counters ?
329      000744      001403          BEQ  5$          ;; if EQ, no
330
331      000746      CALL   XPTCOU      ;; else just zero them
332      000752      000435          BR   30$      ;; thats all
333
334      000754      016400 000060 5$:  MOV  L$BUF(R4),R0      ;; point to message buffer
335      000760      014001          MOV  -(R0),R1      ;; length of message buffer
336      000762      060100          ADD  R1,R0          ;; point past buffer end
337
338      000764      010301          MOV  R3,R1          ;; point to end of response
339      000766      016605          MOV  4+R$R3(SP),R5      ;; point to response start
340      000772      022525          CMP  (R5)+,(R5)+      ;; skip seconds since zeroed
341      000774      010503          MOV  R5,R3          ;; insert transport counters here
342      000776      160501          SUB  R5,R1          ;; calculate response length
343
344      001000      160100          SUB  R1,R0          ;; point to response save area
345      001002          SAVRG  <R0,R1>      ;; push save area address and length
346
347      001006      112520 10$:  MOVB  (R5)+,(R0)+      ;; save DLC counters
348      001010          SOB   R1,10$      ;; ...
349
350      001014          CALL   XPTCOU      ;; get transport counters
351
352      001020      RESRG  <R1,R0>      ;; point to save area
353      001024      020003      CMP  R0,R3      ;; did we overwrite saved data ?
354      001026      101004      BHI  20$      ;; if HI, ok, else
355      001030      012766      MOV  #ME.MPR,4+R$R0(SP)  ;; the dreaded Management Program Error
356      001036      000403          BR   30$
357
358      001040      112023 20$:  MOVB  (R0)+,(R3)+      ;; append saved DLC counters
359      001042          SOB   R1,20$      ;; after transport circuit counters
360
361      001046          30$:  RESRG  <R5>          ;; Restore CCB address
362      001050          RETURN
363
364      000001      .END
  
```

B 13

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```
.TITLE DLMCOU - READ/AND OR ZERO DLM COUNTERS
.IDENT /V05.00/
.ENABL LC
.NLIST END
```

```
:
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```
: MODULE DESCRIPTION:
```

```
: NETWORK MANAGEMENT - READ AND ZERO DLM COUNTERS
```

```
: DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING
```

```
: IDENT HISTORY:
```

```
4.00 07-NOV-83
      DECnet-11M V4.0
      DECnet-11M-PLUS V2.0

5.00 22-JUL-85
      DECnet-11M/S V4.2
      DECnet-11M-Plus V3.0
      DECnet-Micro/RX V1.0
```

C 13

Q\$SRCO= 000012	Q\$STE 000011	SF.PAC= 000020	ZF.COJ= 001000	ZS.ASN= 100000
Q\$RSC= 000004	Q\$STN 000002	SF.REA= 000010	ZF.DDM= 000001	ZS.BSY= 140000
Q\$RSR= 000002	Q\$TIMZ 000036	SF.SER= 000001	ZF.DIA= 004000	Z.AVL 000014
Q\$RST= 000010	Q\$XABQ 000024	SF.SVC= 000002	ZF.DLC= 000002	Z.DAT 000016
Q\$RWC= 000006	Q\$PLI 000034	SF.UNL= 000040	ZF.DVP= 100000	Z.DSP 000000
Q\$WAC= 000014	Q\$WTQ 000030	S\$WRG= 000000	ZF.INI= 040000	Z.FLG 000010
Q\$WCA= 000000	Q\$OPT= 000010	S\$YST= 007600	ZF.KMX= 000020	Z.LEN = 000016
Q\$ALNK 000004	R\$DER= 000000	S.COST 000001	ZF.LLC= 000004	Z.LLN 000006
Q\$BUF2 000020	R\$KTI= 000001	S.FLG 000000	ZF.LMC= 000100	Z.MAP 000020
Q\$CCB 000012	R\$SND= 000000	S.LEN 000004	ZF.MAN= 020000	Z.NAM 000004
Q\$CCBQ 000014	R\$TIM= 000000	S.NMST 000002	ZF.MFL= 000010	Z.PCB 000012
Q\$CNTL 000007	SF\$ANM 000001	S.OWNR 000003	ZF.MTM= 000400	Z.SCH 000007
Q\$FLG 000006	SF\$DNM 000002	T\$KMG= 000000	ZF.MUX= 000040	\$BM = 000000
Q\$LENG 000040	SF.ACT= 000200	T\$MIN= 000000	ZF.PSE= 002000	\$REG = 000001
Q\$LNK 000000	SF.ENA= 000100	V\$CTR= 001000	ZF.SLI= 010000	\$WID = 040000
Q\$PORT 000003	SF.LPB= 000004	XPTCOU= ***** GX	ZF.TIM= 000200	\$SYS= 004374
Q\$SBST 000010	SF.MFL= 000040	X\$DBT= 000000	ZF.X3P= 000000	\$SYX= 000000

. ABS. 177776 000 (RW,I,GBL,ABS,OVR)  
 000222 001 (RW,I,LCL,REL,CON)  
 Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 228  
 Work file writes: 164  
 Size of work file: 33380 Words ( 131 Pages)  
 Size of core pool: 17608 Words ( 67 Pages)  
 Operating system: RSX-11M/PLUS

Elapsed time: 00:00:34.09  
 SY:DLMCOU.V2,[135,134]DLMCOU/CR/-SP=SY:[I,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DLMCOU

CONTEXT AREA OFFSET DEFINITIONS

```

; Flags word bit definitions for X.25 circuits and lines (L$FLX)
;
; Circuits:
000001      L$CHN = 1      ; Set PVC channel
000002      L$CMB = 2      ; Set maximum data
000004      L$CUS = 4      ; Set circuit usage
000010      L$DTE = 10     ; Set DTE
000020      L$MXR = 20     ; Set maximum recalls
000040      L$MXW = 40     ; Set maximum window
000100      L$NUM = 100    ; Set DLM number
000200      L$RET = 200    ; Set recall timer
001000      L$BLK = 1000   ; Set blocking
100000      L$NXC = 100000 ; Circuit is a new X.25 circuit
;
; Lines:
000400      L$HBT = 400    ; Set holdback timer
000002      L$LMB = L$CMB  ; Set max block
000020      L$MRT = L$MXR  ; Set max retransmits
000040      L$MWN = L$MXW  ; Set max window
000200      L$NTI = L$RET  ; Set retransmit timer
010000      L$PRO = 10000  ; Set line protocol
;
; Common:
020000      L$LCT = 20000  ; Set counter timer
;
; Groupings:
020053      L$PVC = L$CHN!L$CMB!L$DTE!L$MXW!L$LCT
000362      L$SVC = L$CMB!L$MXR!L$MXW!L$NUM!L$RET
001004      L$DLM = L$BLK!L$CUS

```

76

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 <sup>B 16</sup>  
Table of contents

6-	55	MACRO CALLS AND LOCAL DATA
7-	70	CONTEXT AREA OFFSET DEFINITIONS
8-	78	ERROR MESSAGE STRINGS
9-	91	DLXQIO - ISSUE I/O REQUEST TO NX:
10-	186	DLXLUN - ASSIGN A LUN TO NX:



CIREOP - CIRCUIT READ INFORMATI MACRO V05.03b Saturday 29-Jun-85 12:18 <sup>D 1</sup>  
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5-	54	MACRO CALLS AND LOCAL DATA
5-	61	BIT DEFINITIONS
6-	66	DISPATCH TABLE FOR READ PARAMETERS OPTIONS
7-	79	CIREOP - CIRCUIT READ INFORMATION OPERATE
7-	80	CIZEOP - CIRCUIT ZERO COUNTERS OPERATE
8-	167	GETCIR - GET THE NEXT CIRCUIT-ID

CIREOP      CREATED BY    MACRO    ON 29-JUN-85 AT 12:18      PAGE 3      C 2

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
L\$SLEN	000066	#5-61
L\$SLT	000042	#5-61
L\$SNM	000046	#5-61
L\$SYL	000122	#5-61
L\$TNM	000052	#5-61
L\$TPT	000050	#5-61
L\$TRB	000040	#5-61
L\$TSZ	000070	#5-61
L\$TYP	000062	#5-61
L\$UNT	000003	#5-61
L.COST	000015	#5-64
L.CTL	000012	#5-64
L.CVA	177776	#5-64
L.DDM	000002	#5-64
L.DDS	000004	#5-64
L.DLC	000003	#5-64
L.DLM	000006	#5-64
L.DLS	000010	#5-64
L.FLG	000000	#5-64
L.KRBA	000016	#5-64
L.LEN	= 000022	#5-64
L.MPF	000022	#5-64
L.NMST	000020	#5-64
L.NSTA	000014	#5-64
L.OWNR	000021	#5-64
L.UNT	000013	#5-64
ME.DON	177600	7-108
ME.FUN	177777	7-153
MF\$ACT	177776	8-194
MO\$CHA	000040	6-72
MO\$COU	000060	6-74
MO\$STA	000020	6-75
MO\$SUM	000000	6-76
MS.SUC	000001	7-121
NXTCIR	= *****	GX 8-188
R\$S1D	= *****	5-63
R\$S1M	= 000000	5-63
R\$S1S	= *****	5-63
SF.ACT	= 000200	#5-64
SF.ENA	= 000100	#5-64
SF.LPB	= 000004	#5-64
SF.MFL	= 000040	#5-64
SF.PAC	= 000020	#5-64
SF.REA	= 000010	#5-64
SF.SER	= 000001	#5-64
SF.SVC	= 000002	#5-64
SF.UNL	= 000040	#5-64
S.COST	000001	#5-64
S.FLG	000000	#5-64
S.LEN	000004	#5-64
S.NMST	000002	#5-64
S.OWN	000003	#5-64

```

387 .SBTTL PUTNOD - Put node id and block size
388
389 *--Putnod - Put node id and block size
390
391 Inputs: R1 = node address
392          TEMP = transport block size
393
394 Output: R3 is updated. The node id, adjusted for
395          the version of NICE spoken by the connected NCP,
396          and the transport block size are put in the response.
397
398 Registers: R0 is trashed.
399
400 .IF DF R5$11S
401 .PSECT NIXCOD ; force code to APR6
402 .ENDC
403
404 001146 PUTNOD:
405 ; Phase 4 command node: return 16 bit node address.
406
407
408 001146 016700 000000G MOV CURCTX,R0 ; push current context address
409 001152 032760 000000C 000000G BIT #CF$VR2!CF$VR3,C$FLAG(R0) ; connected to phase 3 NCP ?
410 001160 001415 BEQ 10$ ; if EQ, no
411
412 ; Phase 3 command node: mask area if target node in executor area,
413 ; otherwise return 16 bit node address.
414
415 001162 010146 MOV R1,-(SP) ; copy address
416 001164 042716 BIC #1777,(SP) ; isolate area
417 001170 017700 MOV @DECP1,R0 ; point to DECnet home block ; RJK05
418 001174 016000 MOV D$NUM(R0),R0 ; get exec address ; **--1
419 001200 042700 BIC #1777,R0 ; area only
420 001204 020026 CMP R0,(SP)+ ; same area as executor ?
421 001206 001002 BNE 10$ ; br if no
422 001210 042701 176000 BIC #^C1777,R1 ; else return as area zero
423
424 001214 004567 000000G 10$: JSR R5,SETPAR ; return adjacent node address parameter
425 001220 001440 .WORD MP$ADJ ; ...
426 001222 000301 .WORD MT$COD!MT$MUL!1 ; coded multiple field (default of 1)
427 001224 010400 MOV R4,R0 ; point to scratch buffer
428 001226 062700 000072 ADD #L$SCR,R0 ;
429 001232 005010 CLR (R0) ; initialize buffer to unique value (0)
430 001234 MAPADD ; map the address into a name
431 001240 103403 BCS 20$ ; if CS, no name found
432 001242 112763 MOVB #MT$COD!MT$MUL!2,-1(R3) ; else, 2 fields to return
433 001250 112723 000302 20$: MOVB #2,(R3)+ ; set address data type (2 bytes)
434 001254 110123 MOVB R1,(R3)+ ; set low byte of address
435 001256 000301 SWAB R1 ;
436 001260 110123 MOVB R1,(R3)+ ; set high byte
437 001262 005710 TST (R0) ; was a name found ?
438 001264 001404 BEQ 30$ ; if EQ, no - return
439 001266 112723 000100 MOVB #MT$ASC,(R3)+ ; else, yes - set name data type
440 001272 CALI SFNAM ; set name into buffer
441
442 ; Return the block size if the request is for "STATUS" (not "SUMMARY")
443

```

CIREST      CREATED BY    MACRO    ON 25-JUL-85 AT 15:36      PAGE 3      C 4  
 SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
L\$NLEN	= 000020	#5-73      5-73      5-73
L\$NOD	000112	#5-73      7-256      7-278      *9-376
L\$NXT	000044	#5-73
L\$OPT	000062	#5-73      10-444
L\$PAR	000120	#5-73
L\$PDV	000055	#5-73      12-509      13-555
L\$PFC	000041	#5-73
L\$PLB	000116	#5-73
L\$PRO	000067	#5-73
L\$PVC	000004	#5-73
L\$SCN	000020	#5-73
L\$SCR	000072	#5-73      7-227      10-428
L\$SLEN	000066	#5-73
L\$SLT	000042	#5-73      7-159      7-218
L\$SNM	000046	#5-73
L\$SYL	000122	#5-73
L\$TNM	000052	#5-73
L\$TPT	000050	#5-73      7-160      7-223
L\$TRB	000040	#5-73
L\$TSZ	000070	#5-73      7-257      7-279      *9-378
L\$TYP	000063	#5-73
L\$UNT	000003	#5-73
L.COST	000015	#5-67
L.CTL	000012	#5-67
L.CVA	177776	#5-67
L.DDM	000002	#5-67
L.DDS	000004	#5-67
L.DLC	000003	#5-67
L.DLM	000006	#5-67
L.DLS	000010	#5-67
L.FLG	000000	#5-67      7-175      7-221
L.KRBA	000016	#5-67
L.LEN	= 000022	#5-67
L.MPF	000022	#5-67
L.NMST	000020	#5-67      7-179
L.NSTA	000014	#5-67      7-180      7-219
L.OWNR	000021	#5-67
L.UNT	000013	#5-67
MAPADD	= *****	GX      10-430
MAPCHN	= *****	GX      7-229
MOSSUM	000000	10-444
MP\$ADJ	001440	10-425
MP\$BLO	001452	10-447
MP\$LOO	000620	7-232
MP\$STA	000000	7-173
MP\$SUB	000001	7-212      13-579
MS\$ADU	000010	6-119
MS\$ALO	000007	6-119
MS\$ASE	000006	6-119      6-119
MS\$ATR	000011	6-119
MS\$CLE	000003	7-177
MS\$DUM	000004	6-107      6-115      6-123

```

150                                     .SBTTL  SETACT - SET ACTIVE POLLING RATE
151
152      ;+
153      ;**--SETACT--SET ACTIVE POLLING RATIO FOR A TRIBUTARY
154      ; THIS ROUTINE IS CALLED TO CHANGE THE ACTIVE POLLING RATE
155      ; FOR A TRIBUTARY.
156
157      ; INPUTS:
158      ;   R4 = ADDRESS OF CONTEXT AREA WITH:
159      ;       L$ACT(R4) = NEW ACTIVE POLLING RATE
160
161      ; OUTPUTS:
162      ;   IF CC, RATE CHANGED,
163      ;   ELSE, ERROR CODE IN R0
164
165      ; REGISTERS:
166      ;   R4, R5 ARE PRESERVED
167      ;-
168
169      000230      SETACT::
170      000230      022764 177777 000050      CMP      #-1,L$TPT(R4)      ; IS THIS A PVC?
171      000236      001435      BEQ      60$      ; BR IF YES - ERROR
172      000240      132764 000010 000041      BITB     #LP$MPT,L$PFG(R4)  ; IS THIS A MULTI-POINT LINE ?
173      000246      001431      BEQ      60$      ; IF EQ, NO - ERROR
174
175      000250      10$:      SWSTK$ 50$      ;: ENTER SYSTEM STATE
176      000254      SAVMAP      ;: SAVE OUR CURRENT MAPPING
177      000260      CALL      FNDDCP      ;: FIND THE DCP LINE TABLE
178      000264      103010      BCC      30$      ;: IF CC, FOUND IT
179      000266      010066 000004      MOV      R0,2+RBIAS(SP)      ;: RETURN ERROR CODE IN SAVED R0
180      000272      RETC      R0      ;: RETURN CARRY TO USER STATE
181      000304      000403      BR      40$      ;: AND RETURN
182      000306      116461 000104 000010 30$:      MOVB     L$ACT(R4),S.PLA(R1) ;: SET THE NEW POLLING RATE
183      000314      000314      40$:      RESMAP      ;: RESTORE PREVIOUS MAPPING
184      000320      RETURN      ;: BACK TO USER STATE
185
186      000322      103011      50$:      BCC      80$      ;: IF CC, SUCCESS
187      000324      022700 177767      CMP      #ME.IID,R0      ;: WAS THE LINE NOT A DDCMP LINE ?
188      000330      001005      BNE      70$      ;: IF NE, NO - RETURN WITH ERROR
189      000332      012764 004420 000072 60$:      MOV      #MP$MAC,L$PAR(R4) ;: ELSE SET PARAMETER IN ERROR
190      000340      012700 177752      MOV      #ME.PNA,R0      ;: SET PARAMETER NOT APPLICABLE ERROR
191      000344      000261      70$:      SEC      ;: ...
192      000346      80$:      RETURN

```

CIRMAP      CREATED BY    MACRO    ON 29-JUN-85 AT 12:20      PAGE 7      C 6  
SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
Z.LEN	= 000016	#5-63
Z.LLN	000006	#5-63
Z.MAP	000020	#5-63
Z.NAM	000004	#5-63
Z.PCB	000012	#5-63
Z.SCH	000007	#5-63
\$HEADR	= ***** GX	6-141      7-180      8-225

MD\$DLV 000020	ME\$ARE 000005	MF\$SYS 000026	MP\$ADS 004406	MP\$DLG 004521
MD\$DMC 000014	ME\$CIR 000003	MF\$TES 000022	MP\$ALB 000036	MP\$DLI= 001466
MD\$DMF 000046	ME\$EXA 000000	MF\$TRA 000301	MP\$AMC 001640	MP\$DLT 002200
MD\$DMP 000022	ME\$EXE 000200	MF\$TRI 000021	MP\$AMH 001641	MP\$DRD 001441
MD\$DMR 000050	ME\$LIN 000001	MF\$ZER 000025	MP\$ANB 004420	MP\$DST 000454
MD\$DMV 000042	ME\$LOG 000002	ML\$ALL 100000	MP\$ASB 000024	MP\$DTE 002140
MD\$DN 000016	ME\$MOD 000004	ML\$CLS 000000	MP\$ASC 004432	MP\$DTE= 001452
MD\$DP 000000	ME\$NOD 000000	ML\$CON 000001	MP\$AUS 000512	MP\$DUA 000207
MD\$DPV 000044	ME\$NON 177777	ML\$EXT 000001	MP\$BBT 002165	MP\$DUC 000210
MD\$DQ 000006	ME\$OBJ 000007	ML\$FIL 000002	MP\$BDF 002164	MP\$DUM 000202
MD\$DTE 000024	ME\$OB2 000034	ML\$FIR 000000	MP\$BFQ 002121	MP\$DUP 002127
MD\$DU 000002	ME\$PRO 000005	ML\$INT 000000	MP\$BLK 001616	MP\$DVC 002114
MD\$DUP 000012	ME\$SYS 000006	ML\$KNO 140000	MP\$BLQ 001452	MP\$DWE 001321
MD\$DV 000026	ME\$BLO 177744	ML\$MON 000003	MP\$BMX 002176	MP\$ELT 00157
MD\$DZ 000030	ME\$CON 177753	ML\$SYS 000002	MP\$BNP 006330	MP\$ETY 001605
MD\$FUL 000000	ME\$CST 177765	ML\$TOP 000001	MP\$BRT 001620	MP\$EVE 000311
MD\$HAL 000001	ME\$DIS 177755	MN\$UNL 000377	MP\$BSA 002176	MP\$FNC 001752
MD\$HEL 000002	ME\$DON 177600	MO\$ACC 000200	MP\$BSD 002203	MP\$GDT 002222
MD\$KCP 000013	ME\$FCC 177762	MO\$ADD 000002	MP\$BSI 002200	MP\$GNM 002223
MD\$KDP 000034	ME\$FIO 177756	MO\$ALA 000004	MP\$BSP 006331	MP\$GRP 002115
MD\$KZ 000036	ME\$FOP 177763	MO\$ALI 000000	MP\$BUF 000170	MP\$GRP 000541
MD\$KL 000040	ME\$FOR 177776	MO\$CHA 000040	MP\$BUP 006324	MP\$GTY 002224
MD\$KMX 000054	ME\$FUN 177777	MO\$CIR 000003	MP\$BUS 001643	MP\$HAD 001757
MD\$KMY 000052	ME\$GRO 177745	MO\$CLE 000100	MP\$CAC 001750	MP\$HBT 002142
MD\$LEN 000050	ME\$HAR 177750	MO\$COU 000060	MP\$CAS 001762	MP\$HDD 000162
MD\$PCL 000011	ME\$IID 177767	MO\$DAC 000000	MP\$CAT 002210	MP\$HTM 001612
MD\$QNA 000005	ME\$LCO 177766	MO\$DEF 000000	MP\$CCS 004406	MP\$HWA 002210
MD\$UNA 000001	ME\$LPR 177757	MO\$DPR 000000	MP\$CHN 002141	MP\$IAT 001322
MD\$WIT 000002	ME\$MPR 177773	MO\$ENT 000017	MP\$CIR 000144	MP\$IDE 000144
MD\$ABO 000017	ME\$MVE 177771	MO\$EVE 000100	MP\$CLK 002131	MP\$IDP 006327
MD\$ACC 000010	ME\$OPE 177747	MO\$INF 000160	MP\$CLN 002126	MP\$IHO 000215
MD\$AOB 000016	ME\$PLO 177751	MO\$INS 000002	MP\$CLT 002211	MP\$INA 002177
MD\$BOB 000011	ME\$PMI 177743	MO\$LIN 000001	MP\$CMB 002142	MP\$IND 002204
MD\$DIA 000007	ME\$PNA 177752	MO\$LOG 000001	MP\$CMK 000537	MP\$INI 002201
MD\$DOB 000015	ME\$PRI 177775	MO\$MIR 000031	MP\$CMX 002153	MP\$ITI 000776
MD\$DUM 000002	ME\$PTY 177772	MO\$NAM 000001	MP\$CND 000310	MP\$LAA 000231
MD\$FAI 000014	ME\$PVA 177760	MO\$NIC 000023	MP\$CNU 001753	MP\$LAN 000234
MD\$FNA 000001	ME\$RES 177761	MO\$NOD 000000	MP\$COB 000311	MP\$LAR 000202
MD\$FOB 000006	ME\$ROO 177754	MO\$OFF 000001	MP\$CON 002126	MP\$LAS 000012
MD\$LOA 000001	ME\$SIZ 177774	MO\$ON 000000	MP\$COS 001604	MP\$LBS 000203
MD\$LSH 000020	ME\$SYS 177746	MO\$OPT 000001	MP\$CPF 000230	MP\$LCO 000226
MD\$NOB 000012	ME\$UCO 177770	MO\$PER 000200	MP\$CPL 000232	MP\$LCT 000156
MD\$NON 177777	MF\$ACT 177776	MO\$PRO 000002	MP\$CPT 000226	MP\$LHL 000232
MD\$PER 000000	MF\$ADD 000000	MO\$PRS 000001	MP\$CFU 000161	MP\$LLE 000227
MD\$PES 000004	MF\$ADJ 177774	MO\$REA 000200	MP\$CSZ 001755	MP\$LLO 004432
MD\$ROB 000005	MF\$ALL 177775	MO\$SET 000000	MP\$CUS 002127	MP\$LMB 002152
MD\$RSH 000013	MF\$BYE 000300	MO\$STA 000020	MP\$CVA 000540	MP\$LMX 002200
MD\$SDU 000005	MF\$CHA 000023	MO\$SUM 000000	MP\$DAL 002570	MP\$LNA 000144
MD\$SLD 000003	MF\$DUM 000020	MO\$TSK 000000	MP\$DCO= 001464	MP\$LNO 000233
MD\$SNA 000000	MF\$EVT 000001	MO\$VOL 000000	MP\$DDT 002177	MP\$LOA 000170
MD\$TLO 000004	MF\$FUP 000264	MO\$ZER 000000	MP\$DEL 001131	MP\$LOG 004514
MD\$UNA 000002	MF\$KNO 177777	MP\$ACB 003012	MP\$DES 000156	MP\$LOO 000620
MD\$UNR 000003	MF\$LOA 000017	MP\$ACC 000514	MP\$DEV 002114	MP\$LTM 001613
MD\$UOB 000007	MF\$LOO 177775	MP\$ACT 004526	MP\$DFA 001320	MP\$LTY 004533
MD\$VOL 000006	MF\$REA 000024	MP\$ADD 000766	MP\$DHO= 001465	MP\$LWI 000230
ME\$ALI 000010	MF\$SIG 177773	MP\$ADJ 001440	MP\$DIA 000173	MP\$MAC 004420
ME\$AL2 000003	MF\$SPF 000302	MP\$ADP 006325	MP\$DLB 002571	MP\$MAD 001630

```

      .SBTTL BIT DEFINITIONS
      ;
      ; PARSE FLAG DEFINITIONS (L$PFG)
      ;
000001      LPSUNT = 1      ; UNIT NUMBER FOUND
000002      LPSTRB = 2     ; TRIBUTARY NUMBER FOUND
000004      LPSMUX = 4     ; DEVICE IS MUX
000010      LPSMPT = 10    ; LINE IS MULTIPOINT
000020      LPSWDV = 20    ; WILD CARD DEVICE NAME FOUND
000040      LPSWCN = 40    ; WILD CARD CONTROLLER NUMBER FOUND
000100      LPSWUN = 100   ; WILD CARD UNIT NUMBER FOUND
000200      LPSWTR = 200   ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LPSWLD = LPSWDV!LPSWCN!LPSWUN!LPSWTR ; WILD CARD FIELD MASK

      ;
      ; FLAGS WORD BIT DEFINITIONS (L$FLG)
      ;
000001      LFSREA = 1     ; READ COUNTERS OPERATION
000002      LFSZER = 2     ; ZERO COUNTERS OPERATION
000004      LFSKSP = 4     ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                          ; THIS IS USED TO FORCE AN EXTRA PASS
                          ; FOR A MULTIPOINT LINE TO RETURN THE
                          ; CONTROLLER COUNTERS AS WELL AS ALL
                          ; OF THE TRIBUTARY COUNTERS.
000010      LFSVR2 = 10    ; CONNECTED TO VERSION 2.0 NCP
000020      LFSEND = 20    ; EXECUTOR IS AN ENDNODE
000040      LFSIG = 40     ; SHOWING SIGNIFIGANT LINES/CIRCUITS
040000      LFSMLT = 40000 ; MULTIPLE ADJACENCY FLAG
100000      LFSSEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS

      ;
      ; BIT POSITION DEFINITIONS
      ;
000001      BIT0 = 1
000002      BIT1 = 2
000004      BIT2 = 4
000010      BIT3 = 10
000020      BIT4 = 20
000040      BIT5 = 40
000100      BIT6 = 100
000200      BIT7 = 200
000400      BIT8 = 400
001000      BIT9 = 1000
002000      BIT10 = 2000
004000      BIT11 = 4000
010000      BIT12 = 10000
020000      BIT13 = 20000
040000      BIT14 = 40000
100000      BIT15 = 100000
  
```



DCPCOU - READ/AND OR ZERO DCP C MACRO V05.03b Saturday 29-Jun-85 12:21 <sup>D 9</sup>  
Table of contents

5-	49	MACRO CALLS AND LOCAL DEFINITIONS
6-	59	CONTEXT AREA DEFINITIONS
7-	61	BIT DEFINITIONS
8-	64	DISPATCH TABLE ENTRY
9-	83	DCPTB? - DDCMP COUNTER TABLES
10-	138	DCPCOU - READ AND/OR ZERO DDCMP COUNTERS

DCPCOU CREATED BY MACRO ON 29-JUN-85 AT 12:21 PAGE 2 C 10  
 SYMBOL CROSS REFERENCE CREF 04.00

SYMBOL	VALUE	REFERENCES
LP\$TRB	= 000002	#7-61 10-193
LP\$UNT	= 000001	#7-61
LP\$WCN	= 000040	#7-61 7-61
LP\$WDV	= 000020	#7-61 7-61
LP\$WLD	= 000360	#7-61
LP\$WTR	= 000200	#7-61 7-61
LP\$WUN	= 000100	#7-61 7-61
L\$ADJ	000110	#6-61
L\$BUF	000060	#6-61
L\$CHN	000054	#6-61
L\$COU	000114	#6-61
L\$CTB	000053	#6-61
L\$CTL	000002	#6-61
L\$DDM	000000	#6-61
L\$FLG	000064	#6-61 10-174 10-205
L\$FLX	000070	#6-61
L\$LEN	000124	#6-61
L\$LTM	000070	#6-61
L\$MSG	000056	#6-61
L\$MTYP	000067	#6-61
L\$NAM	000000	#6-61
L\$NLEN	= 000020	#6-61 6-61 6-61
L\$NOD	000112	#6-61
L\$NXT	000044	#6-61
L\$OPT	000062	#6-61
L\$PAR	000120	#6-61
L\$PDV	000055	#6-61
L\$PFG	000041	#6-61 10-190 10-193
L\$PLB	000116	#6-61
L\$PRO	000067	#6-61
L\$PVC	000004	#6-61
L\$SCN	000020	#6-61
L\$SCR	000072	#6-61
L\$SLEN	000066	#6-61
L\$SLT	000042	#6-61
L\$SNM	000046	#6-61
L\$SYL	000122	#6-61
L\$TNM	000052	#6-61
L\$TPT	000050	#6-61
L\$TRB	000040	#6-61
L\$TSZ	000070	#6-61
L\$TYP	000063	#6-61
L\$UNT	000003	#6-61
L.NLSE	000054	9-130
L.NRSE	000053	9-124
L.SCFW	000056	9-125 9-125 9-126 9-126 9-127 9-127 9-127
		9-128 9-128 9-131 9-131 9-132 9-132 9-132
		9-133 9-133 9-134 9-134 9-134 9-134 9-134
L.TIMC	000060	9-88
N\$SVCT	= *****	10-163
R\$R2	= ***** GX	*10-213
R\$R5	= ***** GX	10-203

DLCCOU - READ AND ZERO DLC PRO MACRO V05.03b Saturday 29-Jun-85 12:22 C 11  
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5-	47	Macro calls and local definitions
6-	60	Context area definitions
7-	62	BIT DEFINITIONS
8-	69	\$PRLCO- Read and zero DLC LINE counters
8-	70	\$PRCCO- Read and zero DLC CIRCUIT counters
9-	202	RQSTCO - Request counters from DLC process
10-	283	COPY - Copy data from LDB to message buffer
11-	309	GETXPT - get transport CIRCUIT counters

ASSCHK= 000000	CM.CIR= 000002	C.LNK 000000	FS.RNG= 011000	LF.X2P= 000000
ASSCPS= 000000	CM.FMT= 100000	C.MOD 000011	FS.RST= 000000	LN.CLO= 000000
ASSPRI= 000000	CM.HRD= 000002	C.N'P 000004	FS.RTN= 001000	LN.DUM= 000005
ASSTRP= 000000	CM.LIN= 000000	C.PRO 000042	FS.SET= 005000	LN.LOA= 000004
BIT0 = 000001	CM.LOD= 000001	C.RSV 000002	FS.SFC= 005000	LN.LOD= 000003
BIT1 = 000002	CM.XLO= 000004	C.STA 000007	FS.SFR= 006000	LN.OAU= 000003
BIT10 = 002000	COPY 000664R	C.STS 000012	FS.SFS= 004000	LN.OFF= 000001
BIT11 = 004000	CP.DCF= 000040	C.URM 177776	FS.SPW= 040000	LN.ON = 000000
BIT12 = 010000	CP.HDL= 000007	C.XACP 000004	FS.STM= 000000	LN.OOP= 000004
BIT13 = 020000	CP.PS = 177400	C.XID 000035	FS.STP= 002000	LN.OFE= 000001
BIT14 = 040000	CP.PSI= 000200	C.XLEN 000044	FS.STR= 001000	LN.REF= 000002
BIT15 = 100000	CP.XCF= 000100	C.XPLI 000040	FS.TRM= 003000	LN.SER= 000002
BIT2 = 000004	CP.2FR= 000030	C.XPT 000034	FS.WLB= 001000	LN.STA= 000017
BIT3 = 000010	CS.ABO= 000100	C.XSVC 000042	FS.XKL= 002000	LN.SUB= 000360
BIT4 = 000020	CS.BRO= 000002	C.XTC 000037	FS.XOF = 010000	LN.TRI= 000006
BIT5 = 000040	CS.BUF= 000200	C.X25 000036	FS.XON= 007000	LP\$MPT= 000010
BIT6 = 000100	CS.CES= 000002	D\$BUG= 177514	FS.ZER= 002000	LP\$MUX= 000004
BIT7 = 000200	CS.CHN= 000010	D\$ISK= 000000	F\$LVL= 000001	LP\$TRB= 000002
BIT8 = 000400	CS.CMP= 000200	D\$L11= 000001	GETXPT 000732R	LP\$UNT= 000001
BIT9 = 001000	CS.DCR= 000400	D\$YNC= 000000	G\$STPP= 000000	LP\$WCN= 000040
B\$10 000003	CS.DEF= 000004	D\$YNM= 000000	G\$STSS= 000000	LP\$WDV= 000020
B\$11 000004	CS.DEV= 000002	ENTITY 000000R	G\$STTK= 000000	LP\$WLD= 000360
B\$12 000005	CS.DIS= 000040	ES\$XPR= 000000	G\$SWRD= 000000	LP\$WTR= 000200
B\$5 000000	CS.ENA= 000001	FC.CCP= 000020	I\$SRAR= 000000	LP\$WUN= 000100
B\$6 000001	CS.ENB= 000020	FC.CTL= 000006	I\$SRDN= 000000	L\$ADJ 000110
B\$7 000002	CS.ERR= 100000	FC.KCP= 000016	KISAR6= *****	L\$BUF 000060
B\$7S10 000006	CS.FTL= 001000	FC.KIL= 000004	K\$CNT= 177546	L\$CHN 000054
CB.CCB= 000002	CS.HCR= 000001	FC.MAN= 000024	K\$CSR= 177546	L\$CDU 000114
CB.DDM= 000040	CS.HFE= 002000	FC.MLD= 000026	K\$SLDC= 000000	L\$CTB 000053
CB.DLC= 000020	CS.LST= 040000	FC.PCT= 000030	K\$STPS= 000074	L\$CTL 000002
CB.RDB= 000004	CS.MTL= 004000	FC.PWR= 000022	LC\$EXT 000000	L\$DDM 000000
CB.SDB= 000010	CS.RNG= 000010	FC.RCE= 000002	LC\$INT 000001	L\$FLG 000064
CB.SLI= 000100	CS.ROV= 000004	FC.RCP= 000014	LDBGT = *****	L\$FLX 000070
CB.XLB= 000001	CS.RSN= 010000	FC.TIM= 000010	LDBRT = *****	L\$LEN 000124
CC.LLC= 000200	CS.SHU= 000001	FC.XCP= 000012	LD\$LP = 000000	L\$LTM 000070
CE.ABO= 100362	CS.SID= 000002	FC.XME= 000000	LF\$END= 000020	L\$MSG 000056
CE.DAO= 100346	CS.STR= 000004	FMTCOU= *****	LF\$MLT= 040000	L\$MTYP 000067
CE.DIS= 100366	CS.SUC= 000001	FORK = *****	LF\$REA= 000001	L\$NAM 000000
CE.ERR= 100370	CS.TMO= 020000	FS.AST= 000000	LF\$SEG= 100000	L\$NLE= 000020
CE.ILN= 100350	CS.XUR= 000004	FS.CIB= 002000	LF\$SIG= 000040	L\$NOD 000112
CE.LTO= 100356	CURCTX= *****	FS.CRA= 001000	LF\$SKP= 000004	L\$NXT 000044
CE.MOP= 100372	C\$CKP= 000000	FS.DIS= 013000	LF\$VR2= 000010	L\$OPT 000062
CE.NTE= 100361	C\$DRE= 000400	FS.DVC= 001000	LF\$ZER= 000002	L\$PAR 000120
CE.RTE= 100376	C\$RSH= 177564	FS.ENB= 012000	LF.ACT= 100000	L\$PDV 000055
CE.SRC= 100364	C.ADD 000034	FS.EXI= 001000	LF.BRO= 000400	L\$PFG 000041
CE.STP= 100352	C.BID 000003	FS.GET= 006000	LF.BWT= 000007	L\$PLB 000116
CE.TME= 100354	C.BUF 000014	FS.HLT= 000000	LF.ENA= 002000	L\$PRO 000067
CE.TMO= 100374	C.BUF1 000014	FS.INI= 000000	LF.LPB= 001000	L\$PVC 000004
CE.UNS= 100344	C.BUF2 000024	FS.KIL= 000000	LF.MDC= 000100	L\$SCN 000020
CF.CHN= 000001	C.CNT 000020	FS.LCL= 100000	LF.MFL= 004000	L\$SCR 000072
CF.EDM= 000004	C.CNT1 000020	FS.LTM= 001000	LF.MTP= 000020	L\$SLEN 000066
CF.HDR= 000020	C.CNT2 000030	FS.MNT= 004000	LF.PAC= 000200	L\$SLT 000042
CF.LB = 100000	C.FLG 000022	FS.MSN= 014000	LF.RDY= 040000	L\$SNM 000046
CF.LIN= 000002	C.FLG1 000022	FS.REA= 001000	LF.REA= 010000	L\$SYL 000122
CF.SOM= 000010	C.FLG2 000032	FS.RET= 000000	LF.SER= 000040	L\$TNM 000052
CF.SYN= 000040	C.FNC 000010	FS.REZ= 003000	LF.TIM= 000010	L\$TPT 000050
CF.TRN= 000100	C.LIN 000006	FS.R'B= 002000	LF.UNL= 020000	L\$TRB 000040

```

49
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56
57 000000
58 000000
59 000000
60 000000
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      .SBTTL  MACRO CALLS AND LOCAL DEFINITIONS
      ;
      ; MACRO LIBRARY CALLS
      ;
      .MCALL  SAVMAP,MAP,BIAS,RESMAP,SAVRG,RESRG,CALLR,DLCOU$
      .MCALL  DLMDF$,SLTDF$,PDVDF$
      .MCALL  CEACC$,MBILD$,CIRCX$

      MBILD$      ; DEFINE MESSAGE BUILDING SYMBOLS
      DLMDF$      ; DEFINE DLM SYMBOLS
      SLTDF$      ; DEFINE SLT OFFSETS
      PDVDF$      ; DEFINE PDV OFFSETS

```

SYMBOL	VALUE	REFERENCES
ASCIMG	= 000100	#5-57
BIT0	= 000001	#7-65
BIT1	= 000002	#7-65
BIT10	= 002000	#7-65
BIT11	= 004000	#7-65
BIT12	= 010000	#7-65
BIT13	= 020000	#7-65 9-86
BIT14	= 040000	#7-65
BIT15	= 100000	#7-65 9-86
BIT2	= 000004	#7-65
BIT3	= 000010	#7-65
BIT4	= 000020	#7-65
BIT5	= 000040	#7-65
BIT6	= 000100	#7-65
BIT7	= 000200	#7-65
BIT8	= 000400	#7-65
BIT9	= 001000	#7-65
B\$10	000003	#6-65
B\$11	000004	#6-65
B\$12	000005	#6-65
B\$5	000000	#6-65
B\$6	000001	#6-65
B\$7	000002	#6-65
B\$7S10	000006	#6-65
CODMUL	= 000300	#5-57
CODSNG	= 000200	#5-57
DECSIG	= 000020	#5-57
DECUNS	= 000000	#5-57
DLMCOU	000006 RG	#10-106
DLMTBO	000000 R	#9-86 10-118
FMTCOU	= ***** GX	10-120
FNDLDM	000062 R	10-109 #11-149
HEX	= 000040	#5-57
HEXIMG	= 177777	#5-57
I\$AS	= *****	5-60
KISAR6	= ***** GX	10-108 *10-123 *11-158
LF\$END	= 000020	#7-65
LF\$MLT	= 040000	#7-65
LF\$REA	= 000001	#7-65
LF\$SEG	= 100000	#7-65
LF\$SIG	= 000040	#7-65
LF\$SKP	= 000004	#7-65
LF\$VR2	= 000010	#7-65
LF\$ZER	= 000002	#7-65
LF.ACT	= 100000	#5-59
LF.BRO	= 000400	#5-59
LF.BWT	= 000007	#5-59
LF.FNA	= 002000	#5-59
LF.LPB	= 001000	#5-59
LF.MDC	= 000100	#5-59
LF.MFL	= 004000	#5-59
LF.MTP	= 000020	#5-59

DLXQ10 - ISSUE I/O TO DLX  
ERROR MESSAGE STRINGS

MACRO V05.03b Saturday 29-Jun-85 12:23 Page 7

```
78 .SBTTL ERROR MESSAGE STRINGS
79 ;
80 ; ERROR MESSAGE STRINGS
81 ;
82 ;.ENABL LC
83 ;
84 ; NOTE: THE NEXT THREE LINES MUST REMAIN CONTIGUOUS
85 ;
86 000004      104      114      130 DLXMSG: .BLKB 1 ; BUFFER FOR DLX STRING LENGTH
87 000005      104      114      130 DLXTXT: .ASCII /DLX error #/
88 000020      104      114      130 DLXERR: .BLKB 6 ; BUFFER FOR DLX ERROR CODE
89 .EVEN
```

```
.IIF NDF M$SACP .TITLE DLXQIO - ISSUE I/O TO DLX
.IIF DF M$SACP .TITLE DLXAST - ISSUE I/O TO DLX AND WAIT FOR AST
.IDENT /V05.00/
.NLIST BEX
```

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#### MODULE DESCRIPTION:

NETWORK MANAGEMENT - ISSUE I/O REQUESTS TO NX: (DLX)

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

#### IDENT HISTORY:

- 1.00 24-MAR-81  
CREATED FROM LICHOP, CONDITIONALIZED TO FORK WHEN RUNNING IN  
THE NETWORK MANAGEMENT ACP
- 2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1
- 4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0
- 5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/RSX V1.0



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.TITLE CIREOP - CIRCUIT READ INFORMATION OPERATE  
.IDENT /V05.00/  
.ENABL LC  
.NLIST CND

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MODULE DESCRIPTION:

NETWORK MANAGEMENT - CIRCUIT READ INFORMATION OPERATE ROUTINE

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

IDENT HISTORY:

- 1.00 01-JUL-81  
DECNET-11M/S V3.1  
DECNET-11M-PLUS V1.1
- 2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1
- 4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0
- 5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/RSX V1.0

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
X\$MBCB	= *****	5-63
ZF.COU	= 001000	#5-63
ZF.DDM	= 000001	#5-63
ZF.DIA	= 004000	#5-63
ZF.DLC	= 000002	#5-63
ZF.DVP	= 100000	#5-63
ZF.INI	= 040000	#5-63
ZF.KMX	= 000020	#5-63
ZF.LLC	= 000004	#5-63
ZF.LMC	= 000100	#5-63
ZF.MAN	= 020000	#5-63
ZF.MFL	= 000010	#5-63
ZF.MTM	= 000400	#5-63
ZF.MUX	= 000040	#5-63
ZF.PSE	= 002000	#5-63
ZF.SLI	= 010000	#5-63
ZF.TIM	= 000200	#5-63
ZF.X3P	= 000000	#5-63
ZS.ASN	= 100000	#5-63
ZS.BSY	= 140000	#5-63
Z.AVL	000014	#5-63
Z.DAT	000016	#5-63
Z.DSP	000000	#5-63
Z.FLG	000010	#5-63
Z.LEN	= 000016	#5-63
Z.LLN	000006	#5-63
Z.MAP	000020	#5-63
Z.NAM	000004	#5-63
Z.PCB	000012	#5-63
Z.SCH	000007	#5-63
\$SAVRG	= *****    GX	7-105

5-63

CIREST - READ CIRCUIT STATUS      MACRO V05.03b Thursday 25-Jul-85 <sup>D 3</sup> 15:35 Page 10-1  
 PUTNOD - Put node id and block size

```

444 001276 126427 000062 000000 30$:  CMPB  L$OPT(R4),#MO$SUM      ; is this a 'read SUMMARY' request ?
445 001304 001410                BEQ  40$                    ; if EQ, yes - don't return block size
446 001306 004567 000000G        JSR  R5,SETPAR              ; return block size
447 001312 001452                .WORD  MP$BLO                ;
448 001314 000002                .WORD  2                    ; block data type = two decimal bytes
449 001316 116723 176526        MOVB  TEMP,(R3)+              ; set segment size low byte
450 001322 116723 176523        MOVB  TEMP+1,(R3)+            ; ...and high byte
451
452 001326                40$:  RETURN
453

```

CIREST - READ CIRCUIT STATUS      MACRO V05.03b Thursday 25-Jul-85 <sup>E 3</sup> 15:35 Page 11  
 SETNAM - Set to image name field

CIREST CREATED BY MACRO ON 25-JUL-85 AT 15:36 PAGE 4 D 4  
 SYMBOL CROSS REFERENCE CREF 04.00

SYMBOL	VALUE	REFERENCES
MS\$FAI	000013	7-205
MS\$LOA	000003	6-115 6-123
MS\$LOO	000002	6-107 6-115 6-123
MS\$OFF	000001	6-91
MS\$ON	000000	6-90 6-93 6-94
MS\$REF	000001	6-107 6-115 6-119
MS\$SER	000002	6-92
MS\$STA	000000	13-581
MS\$TRI	000005	6-107 6-115 6-123
MS\$PAR	000003	7-283
MT\$ASC	000100	7-233 10-439
MT\$COD	000200	7-174 7-213 10-426 10-432 13-580
MT\$MUL	000100	10-426 10-432
MS\$MGE	= 000000	7-269 8-326 8-329
NS\$ADJ1	000072	8-325 9-363
NS\$ADJ2	000074	8-328 9-377
NS\$PLD	= 000016	12-515 12-519
NS\$VCT	= *****	8-314 8-322 8-331 9-353 9-363 9-377 9-381 9-383 12-523
PDVID	= ***** GX	13-566 13-572
PDVTA	= ***** GX	8-318 9-355 12-507 13-553
PSICIR	= ***** GX	8-320 9-357 12-511
PS\$FAI	= 000014	7-167
PS\$UP	= 000012	7-206 7-240
PT\$BRO	= 000200	7-209 7-247
PUTNOD	001146 R	7-294 #10-404
PU\$SCP	= 000002	#13-547 13-576
PS\$CHN	000004	8-316
PS\$LST	000000	7-206 7-209 7-240
PS\$TYP	000001	7-247
P\$CHAN	= 000000	#13-545 13-567
P\$STSC	= 000004	#13-546 13-569
R\$R1	= ***** GX	*8-315 *8-327
R\$R2	= ***** GX	*13-569
R\$SEIS	= *****	7-268
R\$SPRO	= *****	7-164
R\$S11D	= *****	5-65 7-268
R\$S11M	= 000000	5-65 7-269 8-326 8-329
R\$S11S	= *****	5-65 6-85 6-129 7-154 7-164 7-298 10-400 11-488
SETNAM	001330 R	7-234 10-440 #11-473
SETPAR	= ***** GX	7-172 7-211 7-231 10-424 10-446 13-578
SF\$ACT	= 000200	#5-67
SF\$ENA	= 000100	#5-67
SF\$LPB	= 000004	#5-67 7-224
SF\$MFL	= 000040	#5-67
SF\$PAC	= 000020	#5-67
SF\$REA	= 000010	#5-67
SF\$SER	= 000001	#5-67
SF\$SVC	= 000002	#5-67
SF\$UNL	= 000040	#5-67
SNACIR	001470 R	7-203 #13-550
SNAPT	= ***** GX	13-558

```

194 .SBTTL SETDEA - SET DEAD POLLING RATE
195
196 ;+
197 ;**SETDEA-SET DEAD POLLING RATIO FOR A LINE
198 ; THIS ROUTINE IS CALLED TO CHANGE THE DEAD POLLING RATE
199 ; FOR A LINE.
200
201 ; INPUTS:
202 ; R4 = ADDRESS OF CONTEXT AREA WITH:
203 ; L$DEA(R4) = NEW DEAD POLLING RATE
204
205 ; OUTPUTS:
206 ; IF CC, RATE CHANGED,
207 ; ELSE, ERROR CODE IN R0
208
209 ; REGISTERS:
210 ; R4, R5 ARE PRESERVED
211 ; -
212
213 000350 022764 177777 000050 SETDEA::CMP #-1,L$TPT(R4) ; IS THIS A PVC?
214 000356 001441 BEQ 60$ ; BR IF YES - ERROR
215 000360 132764 000010 000041 BITB #LP$MPT,L$PFG(R4) ; IS THIS A MULTI-POINT LINE ?
216 000366 001435 BEQ 60$ ; IF EQ, NO - PARAMETER NOT APPLICABLE
217 000370 132764 000002 000041 BITB #LP$TRB,L$PFG(R4) ; WAS A TRIB NUMBER SPECIFIED ?
218 000376 001031 BNE 60$ ; IF NE, YES - NOT APPLICABLE
219
220 000400 20$: SWSTK$ 50$ ;; ENTER SYSTEM STATE
221 000404 SAVMAP ;; SAVE OUR CURRENT MAPPING
222 000410 CALL FNDDCP ;; FIND THE DCP LINE TABLE
223 000414 103010 BCC 30$ ;; IF CC, FOUND IT
224 000416 010066 000004 MOV R0,2+RBIAS(SP) ;; ELSE, RETURN ERROR CODE IN R0
225 000422 RETC R0 ;; RETURN CARRY TO USER STATE
226 000434 000403 BR 40$ ;; AND RETURN
227 000436 116460 000105 000047 30$: MOVB L$DEA(R4),L.PLD(R0) ;; SET THE NEW POLLING RATE
228 000444 40$: RESMAP ;; RESTORE PREVIOUS MAPPING
229 000450 RETURN ;; BACK TO USER STATE
230
231 000452 103011 50$: BCC 80$ ; IF CC, SUCCESS
232 000454 022700 177767 CMP #ME.IID,R0 ; WAS THE LINE NOT A DDCMP LINE ?
233 000460 001005 BNE 70$ ; IF NE, NO - RETURN WITH ERROR
234 000462 012764 004421 000072 60$: MOV #MP$MDE,L$PAR(R4) ; ELSE, SET PARAMETER IN ERROR
235 000470 012700 177752 MOV #ME.PNA,R0 ; SET PARAMETER NOT APPLICABLE ERROR
236 000474 000261 70$: SEC ; ...
237 000476 80$: RETURN
238
239 .ENDC ; NDF $$$BAS & R$$RTR
240
241 000001 .END

```

MACRO NAME	REFERENCES							
BIAS	#5-59							
CALL	6-120	6-122	6-129	6-133	7-175	7-177	8-220	8-222
CEACCS	#5-59							
CICCCX\$	#5-59	5-76						
DDCDF\$	#5-59	5-65						
DMPDF\$	#5-58	5-62						
MANDF\$	#5-58	5-61						
MAP	#5-59							
PCLDF\$	#5-59	5-66						
PDVDF\$	#5-58	5-63						
RESMAP	#5-59	6-144	7-183	8-228				
RESRG	#5-58							
RETC	#5-59	6-141	7-180	8-225				
RETURN	6-145	6-148	7-184	7-192	8-229	8-237		
SAVMAP	#5-59	6-121	7-176	8-221				
SAVRG	#5-58							
SLTDF\$	#5-58	5-64						
SWSTK\$	6-120	7-175	8-220					
TMPDF\$	#5-66	5-66						
.ADDRB	#5-66							
.ADDRW	#5-66							
.APR	#5-66							
.BIN	#5-66							
.CNB	#5-66							
.CNW	#5-66							
.CORE	#5-66							
.CSR	#5-66	5-66	5-66					
.CTIM	#5-66							
.DPRB	#5-66							
.DPRW	#5-66							
.DVCHA	#5-66	5-66						
.INT	#5-66	5-66	5-66					
.INT1	#5-66							
.INT2	#5-66							
.INT3	#5-66							
.LFLHD	#5-66							
.LIBR	#5-66							
.LINKS	#5-66							
.LSTHD	#5-65	5-66						
.LTAB	#5-66							
.MPLHD	#5-66	5-66						
.MXPTB	#5-66							
.PECHA	#5-66							
.POOL	#5-66							
.PRI	#5-66	5-66	5-66					
.SCOM	#5-66							
.SECSR	#5-66							
.SLNB	#5-66	5-66						
.SLNW	#5-66	5-66						
.STNB	#5-66	5-66						
.STNW	#5-66							
.TIME	#5-66							

MP\$MAP 006323	MP\$PAS 000513	MP\$SUB 000001	MS\$SRV 000007	MX\$DTE 000020
MP\$MAR 001635	MP\$PCH 002152	MP\$SUR 000156	MS\$STA 000000	MX\$FIL 000034
MP\$MAV 005321	MP\$PCO 000024	MP\$SUS 000512	MS\$SYN 000012	MX\$SLG 000777
MP\$MBN 001636	MP\$PCT 000144	MP\$SVR 000163	MS\$TER 000001	MX\$SLN 000020
MP\$MBR 001637	MP\$PDT 002114	MP\$SWI 002260	MS\$TOP 000003	MX\$SLON 000006
MP\$MBJ 001642	MP\$PHA 000170	MP\$SYP 002424	MS\$TRI 000005	MX\$SNMS 000454
MP\$MCB 000156	MP\$PHY 000012	MP\$TFL 000156	MS\$UNR 000005	MX\$SNOD 000006
MP\$MCO 001632	MP\$PLI 000025	MP\$TH1 002206	MS\$VMS 000004	MX\$SOBJ 000006
MP\$MDE 004421	MP\$PLN 002140	MP\$TH2 002205	MS.DON 177600	MX\$SOWN 000040
MP\$MHO 001633	MP\$PLO 000012	MP\$TH3 002202	MS.MOR 000002	MX\$SPAR 000036
MP\$MLB 000202	MP\$PMC 004374	MP\$TLN 000202	MS.PAR 000003	MX\$SPAS 000010
MP\$MLK 001306	MP\$PNT 002126	MP\$TLO 000172	MS.SUC 000001	MX\$SRAC 000047
MP\$MLN 001631	MP\$PRI 004411	MP\$TPA 004375	MT\$AR4 000003	MX\$SRID 000047
MP\$MLP 006333	MP\$PRO 002130	MP\$TRI 002164	MT\$ASC 000100	MX\$SRPS 000047
MP\$MRB 002171	MP\$PSS 001763	MP\$TST 000144	MT\$BIL 000001	MX\$SSID 000040
MP\$MRD 001605	MP\$PST 001762	MP\$TYP 002130	MT\$BYS 000011	MX\$SNK 000377
MP\$MRP 006322	MP\$RET 001631	MP\$UCS 004407	MT\$CI 000007	MX\$STYP 000077
MP\$MRT 002153	MP\$RFA 001323	MP\$USR 001750	MT\$CLE 000077	MX\$UID 000020
MP\$MRV 006320	MP\$RMX 002201	MP\$VEC 004410	MT\$COD 000200	MS\$CRB= 000124
MP\$MSB 000170	MP\$RPA 004374	MP\$VER 004406	MT\$CON 000001	MS\$CRX= 000000
MP\$MVE 000145	MP\$RPR 001606	MP\$WDF 002165	MT\$DMC 000004	MS\$FCS= 000000
MP\$MVI 001634	MP\$RRT 002213	MP\$WMX 002177	MT\$ETH 000006	MS\$MGE= 000000
MP\$MVR 001751	MP\$RST 002212	MP\$XMT 002166	MT\$HEX 000040	MS\$NET= 000000
MP\$MWJ 002154	MP\$RSV 001754	MP\$XPF 000242	MT\$LPB 000005	MS\$OVR= 000000
MP\$MXB 002172	MP\$RSZ 001756	MP\$XPL 000244	MT\$MAX 000037	NM.CLN 003400
MP\$MXC 000466	MP\$RTI 001616	MP\$XPT 000240	MT\$MUL 000100	NM.INI 002400
MP\$MXR 001630	MP\$RTM 001611	MP\$XXX 177777	MT\$NLE 000017	NM.OPR 003000
MP\$MXW 002143	MP\$RVE 001604	MP\$SST 004406	MT\$NON 000001	NM.VR2 002401
MP\$NAA 006335	MP\$RVT 000156	MS\$ACT 000001	MT\$NR4 000005	NM.VR3 002402
MP\$NAC 001130	MP\$SAC 000514	MS\$ADU 000010	MT\$NTY 000060	NS\$ACC= 000001
MP\$NAP 006326	MP\$SAD 000543	MS\$ALO 000007	MT\$OC1 000060	NS\$BUF= 000001
MP\$NCT 000240	MP\$SCA 000310	MS\$ASE 000006	MT\$PHA 000002	NS\$LDV= 000001
MP\$NET 002114	MP\$SCO 000144	MS\$ATR 000011	MT\$PO1 000000	NS\$MCP= 000001
MP\$NLI 000765	MP\$SCT 002176	MS\$AUT 000000	MT\$QP2 000010	NS\$MLL= 000001
MP\$NNA 000764	MP\$SDU 000203	MS\$CLE 000003	MT\$ROU 000000	NS\$MOV= 000010
MP\$NOD 000500	MP\$SDV 000160	MS\$DED 000004	MT\$RO4 000004	NS\$NCT= 000001
MP\$NRA 006334	MP\$SEH 004401	MS\$DIE 000003	MT\$SEC 000000	NS\$PEM= 000001
MP\$NRB 000214	MP\$SER 000144	MS\$DUM 000004	MT\$SGD 000020	PS\$P45= 000000
MP\$NSA 001617	MP\$SET 000000	MS\$FAI 000013	MT\$SYS 000002	PS\$WRD= 000000
MP\$NTI 002141	MP\$SGZ 001644	MS\$GLO 000000	MT\$TER 000001	QS\$OPT= 000010
MP\$NUM 001642	MP\$SID 000176	MS\$HOL 000002	MT\$TRI 000002	RS\$DER= 000000
MP\$NVE 001274	MP\$SIN 000310	MS\$INA 000002	MT\$TYP 007777	RS\$K11= 000001
MP\$NXX= 001476	MP\$SLI 000156	MS\$LOA 000003	MT\$USD 000000	RS\$SND= 000000
MP\$OAC 000632	MP\$SLO 000171	MS\$LDO 000002	MT\$X25 000003	RS\$11M= 000000
MP\$OAN 000620	MP\$SMX 002202	MS\$OFF 000001	MU\$INC 000001	SF\$ANM 000001
MP\$OCO 000776	MP\$SND 000500	MS\$DON 000000	MU\$OUT 000002	SF\$DNM 000002
MP\$OHO 002214	MP\$SNP 006332	MS\$PRO 000006	MU\$PER 000000	SS\$WRG= 000000
MP\$ONA 000764	MP\$SNU 000542	MS\$REA 000004	MV\$III 000000	SS\$YST= 007600
MP\$ONR 002114	MP\$SOB 000524	MS\$REF 000001	MV\$IV 000001	TS\$KMG= 000000
MP\$OQL 001453	MP\$SPA 000157	MS\$RES 000003	MX\$ACT 000020	TS\$MNI= 000000
MP\$OTI 000777	MP\$SPR 000536	MS\$RST 000001	MX\$CLR 000020	V\$CTR= 001000
MP\$OTY 001022	MP\$SPS 000513	MS\$RSX 000002	MX\$CLN 000020	X\$SDBT= 000000
MP\$OUS 000777	MP\$STA 000000	MS\$RT 000005	MX\$CNM 000006	XS\$VRG= *****
MP\$OVE 001010	MP\$STI 002140	MS\$SER 000002	MX\$CON 000006	SS\$SYS= 004374
MP\$OWN 004374	MP\$STT 002201	MS\$SHU 000002	MX\$DAC 000020	SS\$SYX= 000000
MP\$PAR 000036	MP\$STY 000175			

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```
.SBTTL DISPATCH TABLE ENTRY
:
: GENERATE AN ENTRY IN THE DISPATCH TABLES OF THE
: LINE AND CIRCUIT READ COUNTER MODULES.
:
  .IF DF R$$$11S ! S$$$BAS ! R$$$RTR ! R$$$PRO
    .PSECT $$$DLLO
    .WORD ^RDA,DALIN          ; READ LINE COUNTERS ENTRYPOINT
    .PSECT $$$DLCO
    .WORD ^RDA,DACIR          ; READ CIRCUIT COUNTERS ENTRYPOINT
    .PSECT
  .ENDC
```



```
.TITLE DCPCOU - READ/AND OR ZERO DCP COUNTERS
.IDENT /V05.00/
.ENABL LC
.NLIST CND
```

```
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```
: MODULE DESCRIPTION:
```

```
: NETWORK MANAGEMENT - READ AND ZERO DCP COUNTERS
```

```
: DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING
```

```
: IDENT HISTORY:
```

```
: 4.00 07-NOV-83
:       DECNET-11M V4.0
:       DECNET-11M-PLUS V2.0
:
: 5.00 22-JUL-85
:       DECnet-11M/S V4.2
:       DECnet-11M-Plus V3.0
:       DECnet-Micro/Rsx V1.0
```

SYMBOL	VALUE	REFERENCES								
R\$SPRO	= *****	8-69								
R\$SRTS	= *****	8-69								
R\$S11S	= *****	8-69								
SE.IRS	= 004000	9-121								
SE.NRS	= 002000	9-120								
SE.RBS	= 001000	9-112								
SE.RBU	= 000400	9-111								
SE.RCH	= 000001	9-104								
SE.RDC	= 000002	9-105								
SE.RRR	= 000004	9-106								
SE.SBS	= 000200	9-116								
SE.SBU	= 000100	9-115								
SE.SDC	= 000020	9-100								
SE.SHC	= 000010	9-99								
SE.SRR	= 000040	9-101								
\$S\$BAS	= *****	8-69								
S.DLCF	000102	9-99	9-99	9-99	9-100	9-100	9-100	9-101	9-101	9-101
		9-104	9-104	9-104	9-105	9-105	9-105	9-106	9-106	9-106
		9-111	9-111	9-111	9-112	9-112	9-112	9-115	9-115	9-115
		9-116	9-116	9-116	9-120	9-120	9-120	9-121	9-121	9-121
S.NKRB	000052	9-110								
S.NKRW	000045	9-103								
S.NKSB	000051	9-114								
S.NKSW	000040	9-98								
S.RCVB	000072	9-94								
S.RCVC	000056	9-96								
S.REPR	000050	9-108								
S.REPS	000047	9-109								
S.SELC	000066	9-118								
S.SELT	000053	9-119								
S.TIMC	000054	9-81								
S.XMTB	000076	9-95								
S.XMTC	000062	9-97								
XPTCOU	= *****	10-207								
\$S\$M	= 010000	#9-87	9-87	#9-88	9-88	#9-94	9-94	#9-95	9-95	#9-96
		9-96	#9-97	9-97	#9-98	#9-98	9-98	#9-103	#9-103	9-103
		#9-108	9-108	#9-109	9-109	#9-110	#9-110	9-110	#9-114	#9-114
		9-114	#9-118	9-118	#9-119	#9-119	9-119	#9-124	#9-124	9-124
		#9-130	#9-130	9-130						
\$S\$OFF	= 000056	#9-99	9-99	#9-100	9-100	#9-101	9-101	#9-104	9-104	#9-105
		9-105	#9-106	9-106	#9-111	9-111	#9-112	9-112	#9-115	9-115
		#9-116	9-116	#9-120	9-120	#9-121	9-121	#9-125	9-125	#9-126
		9-122	#9-127	9-127	#9-128	9-128	#9-131	9-131	#9-132	9-132
		#9-133	9-133	#9-134	9-134					
\$S\$REG	= 000000	#9-87	9-87	#9-88	9-88	#9-94	9-94	9-94	9-94	#9-95
		9-95	9-95	#9-96	9-96	#9-97	9-97	#9-97	9-97	#9-98
		#9-98	9-98	#9-103	9-103	#9-108	#9-108	#9-108	9-108	#9-109
		#9-109	9-109	#9-110	9-110	9-110	#9-114	#9-114	9-114	#9-118
		#9-118	9-118	#9-119	9-119	9-119	#9-124	9-124	#9-130	9-130
\$S\$TST	= 00 '00	#9-99	9-99	9-100	9-100	#9-101	9-101	#9-104	9-104	#9-105
		9-105	#9-106	9-106	#9-111	9-111	#9-112	9-112	#9-115	9-115
		#9-116	9-116	#9-120	9-120	#9-121	9-121	#9-125	9-125	#9-126

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.TITLE DLCCOU - READ AND ZERO DLC PROCESS COUNTERS  
.IDENT /V05.00/  
.ENABL LC

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MODULE DESCRIPTION:

Network Management - Read and Zero DLC process counters

Author: Dave Rachlis

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

IDENT HISTORY:

4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS v2.0  
  
5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/Rsx V1.0

L\$TSZ	000070	MC\$LRB	002020	MC\$XCR	002260	MD.FAI	000014	ME.PVA	177760
L\$TYP	000063	MC\$LRP	002114	MC\$XCS	002261	MD.FNA	000001	ME.RES	177761
L\$UNT	000003	MC\$LRM	002006	MC\$XDR	001762	MD.FOB	000006	ME.R00	177754
L\$ASG=	000000	MC\$LSI	002032	MC\$XDS	001763	MD.LOA	000001	ME.SIZ	177774
L\$SDRV=	000000	MC\$LST	002033	MC\$XFR	002272	MD.LSH	000020	ME.SYS	177746
L\$SPI1=	000001	MC\$SLUP	006072	MC\$XFS	002273	MD.NOB	000012	ME.UCO	177770
L\$11R=	000000	MC\$SMAP	010000	MC\$XLJ	000323	MD.NON	177777	MF.SACT	177776
L.COST	000015	MC\$MBL	001764	MC\$XLR	002330	MD.PER	000000	MF.SADD	000000
L.CTL	000012	MC\$MBX	004420	MC\$XMA	000310	MD.RES	000004	MF.SADJ	177774
L.CVA	177776	MC\$MBY	001752	MC\$XMS	002305	MD.ROB	000005	MF.SALL	177775
L.DDM	000002	MC\$MPX	004406	MC\$XMS	002304	MD.RSH	000013	MF.SBYE	000300
L.DDS	000004	MC\$NAP	001604	MC\$XNR	002332	MD.SDU	000005	MF.SCHA	000023
L.DLC	000003	MC\$NBR	001130	MC\$XRC	002316	MD.SLO	000003	MF.SDUM	000020
L.DLM	000006	MC\$NBS	001131	MC\$XRR	002331	MD.SNA	000000	MF.SEV7	000001
L.DLS	000010	MC\$NCP	001154	MC\$XRS	002342	MD.TLO	000004	MF.SFUP	000264
L.FLG	000000	MC\$NCS	001155	MC\$O20	000002	MD.UNA	000002	MF.SKNO	177777
L.KRBA	000016	MC\$NML	001274	MD\$CI	000007	MD.UNR	000003	MF.SLOA	000017
L.LEN =	000022	MC\$NMR	001142	MD\$CNA	000003	MD.UOB	000007	MF.SLOO	177775
L.MPF	000022	MC\$NMS	001143	MD\$COU	000001	ME.VOL	000006	MF.SREA	000024
L.NMST	000020	MC\$NNO	001606	MD\$DA	000010	ME\$ALI	000010	MF.SSIG	177773
L.NSTA	000014	MC\$NNU	001605	MD\$DL	000004	ME\$AL2	000003	MF.SSPF	000302
L.OWNR	000021	MC\$NOP	001607	MD\$DLV	000020	ME\$ARE	000005	MF.SSYS	000026
L.UNT	000013	MC\$NOR	000000	MD\$DMC	000014	ME\$CIR	000003	MF.STES	000022
MB\$DIS	000001	MC\$NPF	001616	MD\$DMF	000046	ME\$EXA	000000	MF\$TRA	000301
MB\$ENA	000000	MC\$NPR	001630	MD\$DMP	000022	ME\$EXE	000200	MF\$TRI	000021
MB\$FUL	000002	MC\$NRE	001200	MD\$DMR	000050	ME\$LIN	000001	MF\$TRI	000025
MB\$MIX	000002	MC\$NRT	001166	MD\$DMV	000042	ME\$LOG	000002	ML\$ALL	100000
MB\$ONE	000001	MC\$NVR	001642	MD\$DN	000016	ME\$MOD	000004	ML\$CLS	000000
MB\$RXO	000001	MC\$POB	000000	MD\$DP	000000	ME\$NOD	000000	ML\$CON	000001
MB\$TXC	000000	MC\$P11	000001	MD\$DPV	000044	ME\$NON	177777	ML\$EXT	000001
MB\$ZER	000000	MC\$RFL	002046	MD\$DQ	000006	ME\$OBJ	000007	ML\$FIL	000002
MC\$BAB	006073	MC\$SBU	002051	MD\$DTE	000024	ME\$OB2	000004	ML\$FIR	000000
MC\$BID	001765	MC\$SFL	002044	MD\$DU	000002	ME\$PRO	000005	ML\$INT	000000
MC\$BMC	001767	MC\$SYL	000012	MD\$DUP	000012	ME\$SYS	000006	ML\$KNO	140000
MC\$BSC	001766	MC\$SYL	000036	MD\$DV	000026	ME.BLO	177744	ML\$MON	000003
MC\$CAC	001442	MC\$SYR	000050	MD\$DZ	000030	ME.CON	177753	ML\$SYS	000002
MC\$CAP	001440	MC\$SYZ	000024	MD\$FUL	000000	ME.CST	177765	ML\$TOP	000001
MC\$CCL	001445	MC\$SYZ	000000	MD\$HAL	000001	ME.DIS	177755	MN\$UNL	000377
MC\$CDC	002045	MC\$TBR	001140	MD\$HEL	000002	ME.DON	177600	MO\$ACC	000200
MC\$CDP	001441	MC\$TBS	001141	MD\$KCP	000013	ME.FCO	177762	MO\$ADD	000002
MC\$CIF	001465	MC\$TDR	002053	MD\$KDP	000034	ME.FIO	177756	MO\$ALA	000004
MC\$CLD	001464	MC\$TIM	000000	MD\$KDZ	000036	ME.FOP	177763	MO\$ALI	000000
MC\$COU	100000	MC\$TYP	007777	MD\$KL	000040	ME.FOR	177776	MO\$CHA	000040
MC\$CTL	001454	MC\$UBU	002052	MD\$KMX	000054	ME.FUN	177777	MO\$CIR	000003
MC\$CTR	001452	MC\$UFD	002047	MD\$KMY	000052	ME.GRO	177745	MO\$CLE	000100
MC\$CTS	001453	MC\$UMR	001132	MD\$LEN	000050	ME.HAR	177750	MO\$COU	000060
MC\$DOV	002050	MC\$UMS	001133	MD\$PCL	000011	ME.IID	177767	MO\$DAC	000000
MC\$SLR	001750	MC\$VAX	000003	MD\$QNA	000005	ME.LCO	177766	MO\$DEF	000000
MC\$LSB	001751	MC\$WID	060000	MD\$UNA	000001	ME.LPR	177757	MO\$DPR	000000
MC\$LDI	001774	MC\$WIH	040000	MD\$WIT	000002	ME.MPR	177773	MO\$ENT	000017
MC\$LDO	001775	MC\$WIL	020000	MD.ABO	000017	ME.MVE	177771	MO\$EVE	000100
MC\$LDR	001762	MC\$WOB	020000	MD.ACC	000010	ME.CPE	177747	MO\$INF	000160
MC\$LDS	001763	MC\$W16	040000	MD.AOB	000016	ME.PLO	177751	MO\$INS	000002
MC\$LLB	002021	MC\$W32	060000	MD.BOB	000011	ME.PMI	177743	MO\$LIN	000001
MC\$LLP	002115	MC\$XBR	001750	MD.DIA	000007	ME.PNA	177752	MO\$LOG	000001
MC\$LLR	002007	MC\$XBS	001751	MD.DOB	000015	ME.PRI	177775	MO\$MIR	000031
MC\$LOO	000001	MC\$XCJ	000322	MD.DUM	000002	ME.PTY	177772	MO\$NAM	000001

```

CONTEXT AREA DEFINITIONS

63          .SBTTL  CONTEXT AREA DEFINITIONS
64
65 000000    CIRCX$ LIST

;
; CONTEXT AREA OFFSET DEFINITIONS
;
000020      .ASECT
            = 0
            L$NLEN = 16.          ; MAXIMUM NAME LENGTH

; The offsets L$NAM to L$PDV inclusive must appear in the same order
; as in the CIRCX$ and LOCCX$ macros.

000000      L$NAM:
000000      L$DDM: .BLKW 1          ; DEVICE NAME
000002      L$CTL: .BLKB 1          ; CONTROLLER NUMBER
000003      L$UNT: .BLKB 1          ; UNIT NUMBER
000004      L$PVC: .BLKW 1          ; 3RD WORD OF PVC NAME
            = 0+L$NLEN          ; SPACE FOR EXPANDED CIRCUIT NAME
000020      L$SCN: .BLKB L$NLEN    ; CURRENT NAME IN WILDCARD SCAN
000040      L$TRB: .BLKB 1          ; TRIBUTARY NUMBER
000041      L$PFG: .BLKB 1          ; PARSE FLAGS
000042      L$SLT: .BLKW 1          ; Current SLT/PVC address
000044      L$NXT: .BLKW 1          ; Pointer to next SLT/PVC address
000046      L$SNM: .BLKW 1          ; REMAINING NUMBER OF SYSTEM LINES
000050      L$TPT: .BLKW 1          ; Current tributary pointer (-1 for PSI)
000052      L$TNM: .BLKB 1          ; REMAINING NUMBER OF TRIBUTARIES
000053      L$CTB: .BLKB 1          ; CURRENT TRIBUTARY NUMBER
000054      L$CHN: .BLKB 1          ; Channel number / X.25 port number and
000055      L$PDV: .BLKB 1          ; ... PDV assigned
000056      L$MSG: .BLKW 1          ; ERROR MESSAGE STRING POINTER
000060      L$BUF: .BLKW 1          ; SAVED BUFFER POINTER
000062      L$OPT: .BLKB 1          ; SAVED OPTIONS BYTE
000063      L$TYP: .BLKB 1          ; LINE-ID FORMAT TYPE
000064      L$FLG: .BLKW 1          ; FLAG WORD
000066      L$SLEN: .BLKB 1          ; Significant length of circuit name
000067      L$PRO: .BLKB 1          ; Line protocol
000067      L$MTYP: .BLKB 1          ; Network management circuit type
000070      L$TSZ: .BLKB 1          ; Block size for transport circuits
000070      L$LTM: .BLKB 1          ; Listen timer for transport circuits
000070      L$FLX: .BLKW 1          ; Flags word for X.25 circuit commands
000072      L$SCR: .BLKW 7          ; SCRATCH BUFFER
000110      L$ADJ: .BLKW 1          ; Pointer to adjacency database
000112      L$NOD: .BLKW 1          ; Adjacent node address
000114      L$COU: .BLKW 1          ; Count of adjacency entries
000116      L$PLB: .BLKW 1          ; PLB address
000120      L$PAR: .BLKW 1          ; PARAMETER TYPE
000122      L$SYL: .BLKW 1          ; System line number
000124      L$LEN: .BLKW 1          ; LENGTH OF CONTEXT AREA
000000      .PSECT

;
; OFFSETS INTO SCRATCH BUFFER (L$SCR) FOR DMC BASE TABLE COUNTERS
;
000124      .ASECT
            = 0
000000      B$5: .BLKB 1          ; BASE TABLE + 5
000001      B$6: .BLKB 1          ; BASE TABLE + 6

```

SYMBOL CROSS REFERENCE CREF 04.00

SYMBOL	VALUE	REFERENCES
LF.PAC	= 000200	#5-59
LF.RDY	= 040000	#5-59 11-151
LF.REA	= 010000	#5-59
LF.SER	= 00C040	#5-59
LF.TIM	= 000010	#5-59
LF.UNL	= 020000	#5-59
LF.X2P	= 000000	#5-59
LN.CLO	= 000000	#5-59
LN.DUM	= 000005	#5-59
LN.LOA	= 000004	#5-59
LN.LOO	= 000003	#5-59
LN.OAU	= 000003	#5-59
LN.OFF	= 000001	#5-59
LN.ON	= 000000	#5-59
LN.OOP	= 000004	#5-59
LN.OPE	= 000001	#5-59
LN.REF	= 000002	#5-59
LN.SER	= 000002	#5-59
LN.STA	= 000017	#5-59
LN.SUB	= 000360	#5-59
LN.TRI	= 000006	#5-59
LP\$MPT	= 000010	#7-65
LP\$MUX	= 000004	#7-65
LP\$TRB	= 000002	#7-65
LP\$UNT	= 000001	#7-65
LP\$WCN	= 000040	#7-65 7-65
LP\$WDV	= 000020	#7-65 7-65
LP\$WLD	= 000360	#7-65
LP\$WTR	= 000200	#7-65 7-65
LP\$WUN	= 000100	#7-65
L\$ADJ	000110	#6-65
L\$BUF	000060	#6-65
L\$CHN	000054	#6-65
L\$COU	000114	#6-65
L\$CTB	000053	#6-65
L\$CTL	000002	#6-65
L\$DDM	000000	#6-65
L\$FLG	000064	#6-65
L\$FLX	000070	#6-65
L\$LEN	000124	#6-65
L\$LTM	000070	#6-65
L\$MSG	000056	#6-65
L\$MTYP	000067	#6-65
L\$NAM	000000	#6-65
L\$NLN	= 000020	#6-65 6-65 6-65
L\$NOD	000112	#6-65
L\$NXT	000044	#6-65
L\$OPT	000062	#6-65
L\$PAR	000120	#6-65
L\$PDV	000055	#6-65
L\$PFG	000041	#6-65
L\$PLB	000116	#6-65

```

91      .SBTTL DLXQ10 - ISSUE I/O REQUEST TO NX:
92
93      **DLXQ10-ISSUE I/O REQUEST TO DLX
94
95      THIS ROUTINE IS CALLED TO ISSUE A DLX REQUEST.
96
97      INPUTS:
98      R0 = FUNCTION CODE
99      R1 = P1 (OPTIONAL)
100     R4 = ADDRESS OF CONTEXT BLOCK
101
102      OUTPUTS:
103      IF CC, OPERATION SUCCEEDED
104      ELSE, OPERATION FAILED, ERROR CODE FILLED INTO DLXMSG STRING
105
106      REGISTERS:
107      NO REGISTERS MODIFIED
108
109      -
110     DLXQ10::
111     CALL    $$SAVAL                ; SAVE ALL REGISTERS
112
113     ;
114     ; FORMAT LINE-ID STRING FOR DLX
115     ;
116     .IF NDF M$$ACP
117
118     MOV     R4,R3                  ; COPY THE CONTEXT AREA POINTER
119     ADD     #L$$SCR,R3            ; POINT TO THE SCRATCH BUFFER
120
121     .IFF    ;NDF M$$ACP
122
123     MOV     CURCTX,R3              ; COPY THE CONTEXT AREA POINTER
124     MOV     R3,R5                  ;
125     ADD     #C$LOC,R3             ; POINT TO THE SCRATCH BUFFER
126     ADD     #C$STAT,R5            ; ... AND THE I/O STATUS BLOCK
127
128     .IFTF   ;NDF M$$ACP
129
130     SAVRG   <R3>                  ; SAVE R3
131
132     .IF DF   S$$BAS ! R$$RTR
133
134     CALL    FMTLN2                ; FORMAT PHYSICAL LINE-ID
135
136     .IFF
137
138     CALL    FMTLIN                ; FORMAT A LINE-ID STRING
139
140     .ENDC   ; DF S$$BAS ! R$$RTR
141
142     RESRG   <R3>                  ; RESTORE LINE-ID POINTER
143     MOVB    (R3)+,R2              ; GET STRING LENGTH
144
145     ;
146     ; ISSUE I/O
147     .IFT    ;NDF M$$ACP

```

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 Page 6  
D 16  
MACRO CALLS AND LOCAL DATA

```
55      .SBTTL  MACRO CALLS AND LOCAL DATA
56      ;
57      ; MACRO LIBRARY CALLS
58      ;
59      .MCALL  SAVRG,RESRG,CICCX$
60      .MCALL  ALUN$$,WSIG$$,QIOW$$,QIO$$,GLUN$$
61      ;
62      ; LOCAL DATA
63      ;
64      .IF NDF M$$ACP
65
66      IOSB:  .BLKW  2                      ; I/O STATUS BLOCK FOR DLX QIO
67
68      .ENDC  ;NDF M$$ACP
```



```

54                                     .SBTTL  MACRO CALLS AND LOCAL DATA
55                                     ;
56                                     ; MACRO LIBRARY CALLS
57                                     ;
58                                     .MCALL  MANDF$,PDVDF$,SLTDF$,CIRCX$
59
60
61 000000                                CIRCX$                                ; DEFINE CONTEXT AREA
62 000000                                MANDF$                                ; DEFINE NETWORK MANAGEMENT SYMBOLS
63 000000                                PDVDF$                                ; DEFINE PDV OFFSETS
64 000000                                SLTDF$                                ; DEFINE SLT OFFSETS

```

CIREOP      CREATED BY    MACRO    ON 29-JUN-85 AT 12:18      PAGE 5      E 2

MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME	REFERENCES
CALL	7-116      7-125      7-137      8-188
CIRCX\$	#5-58      5-61
MANDF\$	#5-58      5-62
PDVDF\$	#5-58      5-63
RETURN	7-165      8-213
SLTDF\$	#5-58      5-64

```

455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473 001330 010302
474 001330 010302
475 001332 112723 000007
476 001336 112023
477 001340 112023
478 001342 112023
479 001344 112023
480 001346 112023
481 001350 112023
482 001352 105312
483 001354 124327 000040
484 001360 001774
485 001362 005203
486 001364
487
488
489
490

.SBTTL SETNAM - Set an image name field
+
**SETNAM-SET AN IMAGE NAME FIELD
THIS ROUTINE BUILDS AN IMAGE NAME FIELD, DELETING TRAILING
SPACES.
INPUTS:
R0 = POINTER TO 6 CHAR SPACE-FILLED NAME
R3 = ADDRESS OF NEXT BYTE IN OUTPUT BUFFER
OUTPUTS:
R3 = ADDRESS OF NEXT BYTE IN OUTPUT BUFFER
REGISTERS:
R4, R5 ARE PRESERVED
-
SETNAM:
MOV R3,R2 ; COPY BUFFER POINTER
MOVB #7,(R3)+ ; ASSUME NAME IS 6 CHARS
MOVB (R0)+,(R3)+ ; SET NAME IN BUFFER
MOVB (R0)+,(R3)+ ; ...
MOVB (R0)+,(R3)+ ; ...
MOVB (R0)+,(R3)+ ; ...
MOVB (R0)+,(R3)+ ; ...
MOVB (R0)+,(R3)+ ; ...
10$: DECB (R2) ; DEC FIELD COUNT
CMPB -(R3),#' ; IS THE LAST CHARACTER A SPACE ?
BEQ 10$ ; IF EQ, 'ES - DELETE IT
INC R3 ; ELSE, SKIP OVER IT
RETURN
.IF DF R$$11S
.PSECT
.ENDC

```

CIREST      CREATED BY    MACRO    ON 25-JUL-85 AT 15:36      PAGE 5      E   4

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
SPACE	= 000040	#1-75
STATBL	000000 R	#6-89      7-190
SUBTBL	000005 R	#6-103      7-197
\$SPUNX	= 000006	#13-548      13-560
S.COST	000001	#5-67
S.FLG	000000	#5-67      7-224
S.LEN	000004	#5-67
S.NMST	000002	#5-67      7-182
S.OWNR	000003	#5-67
TEMP	000050 R	#6-133      *7-257      *7-279      *8-330      10-449      10-450
X\$MBCB	= *****	5-65
ZF.COU	= 001000	#5-65
ZF.DDM	= 000001	#5-65
ZF.DIA	= 004000	#5-65
ZF.DLC	= 000002	#5-65
ZF.DVP	= 100000	#5-65
ZF.INI	= 040000	#5-65
ZF.KMX	= 000020	#5-65
ZF.LLC	= 000004	#5-65
ZF.LMC	= 000100	#5-65
ZF.MAN	= 020000	#5-65
ZF.MFL	= 000010	#5-65
ZF.MTM	= 000400	#5-65
ZF.MUX	= 000040	#5-65
ZF.PSE	= 002000	#5-65
ZF.SLI	= 010000	#5-65
ZF.TIM	= 000200	#5-65
ZF.X3P	= 000000	#5-65
ZS.ASN	= 100000	#5-65
ZS.BSY	= 140000	#5-65
Z.AVL	000014	#5-65
Z.DAT	000016	#5-65      8-323      9-361      12-513
Z.DSP	000000	#5-65      5-65      8-322      9-359
Z.FLG	000010	#5-65
Z.LEN	= 000016	#5-65
Z.LLN	000006	#5-65
Z.MAP	000020	#5-65
Z.NAM	000004	#5-65
Z.PCB	000012	#5-65
Z.SCH	000007	#5-65
\$CEACC	= ***** GX	13-566
\$HEADR	= ***** GX	9-381      12-523      13-572
\$MUL	= ***** GX	7-195

AS\$CHK= 000000	LF.LPB= 001000	LS\$L00= 040000	L\$LTm 000230	L.DDS 000004
AS\$CPS= 000000	LF.MDC= 000100	LS\$MDT= 020000	L\$MRT 000253	L.DTSL 000042
AS\$PRI= 000000	LF.MFL= 004000	LS\$MRT= 000020	L\$MSG 000056	L.DISR 000044
AS\$TRP= 000000	LF.MTP= 000020	LS\$MUN= 000040	L\$MTYP 000075	L.DLC 000003
BF.TRC= 000004	LF.PAC= 000200	LS\$MXB= 001000	L\$MWN 000252	L.DLM 000006
C\$CKP= 000000	LF.RDY= 040000	LS\$MXR= 000020	L\$MXB 000133	L.DLS 000010
C\$ORE= 000400	LF.REA= 010000	LS\$MXW= 000040	L\$MXR 000253	L.ENA 000066
C\$SRSH= 177564	LF.SER= 000040	LS\$NMT= 020000	L\$MXW 000252	L.FLG 000000
DF.CRC= 000010	LF.TIM= 000010	LS\$NOR= 100000	L\$NAM 000000	L.KRBA 000016
DF.FOC= 000020	LF.UNL= 020000	LS\$NTI= 000200	L\$NLEN= 000020	L.LEN = 000022
DF.RAN= 000040	LF.X2P= 000000	LS\$NTL= 000001	L\$NMT 000116	L.LNUM 000046
DF.UNK= 000100	LN.CLO= 000000	LS\$NUM= 000100	L\$NTI 000256	L.MPF 000022
D\$BUG= 177514	LN.DUM= 000005	LS\$OWN= 000010	L\$NTL 000134	L.NAST 000065
D\$ISK= 000000	LN.LOA= 000004	LS\$PLT= 004000	L\$NUM 000240	L.NCUB 000012
D\$SL1= 000001	LN.LOO= 000003	LS\$PRO= 010000	L\$NUML 000236	L.NCUL= 000050
D\$SYNC= 000000	LN.OAU= 000003	LS\$PVC= 020053	L\$NXT 000044	L.NIP 000010
D\$SYNM= 000000	LN.OFF= 000001	LS\$RET= 000200	L\$OPT 000062	L.NLSE 000054
E\$XPR= 000000	LN.ON = 000000	LS\$SER= 100000	L\$OWN 000102	L.NMST 000020
FNDDCP= *****	LN.OOP= 000004	LS\$STA= 000002	L\$PAR 000072	L.NRSE 000053
FNDMDP= *****	LN.OPE= 000001	LS\$SVC= 000362	L\$PDV 000055	L.NSTA 000014
FNDPCL= *****	LN.REF= 000002	LS\$TAD= 000020	L\$PFG 000041	L.OWNR 000021
F\$SLVL= 000001	LN.SER= 000002	LS\$TH1= 000100	L\$PLT 000112	L.PAIC 000017
G\$STPP= 000000	LN.STA= 000017	LS\$TH2= 000200	L\$PRO 000075	L.PAIR 000016
G\$STSS= 000000	LN.SUB= 000360	LS\$TH3= 000400	L\$PVC 000044	L.PLD 000047
G\$STTK= 000000	LN.TRI= 000006	LS\$XMT= 040000	L\$RET 000256	L.PLL 000012
G\$SWRD= 000000	LP\$MPT= 000010	L\$ACT 000104	L\$SCN 000020	L.SCFW 000056
I\$RAR= 000000	LP\$MUX= 000004	L\$BBT 000114	L\$SCR 000166	L.STA 000063
I\$RDN= 000000	LP\$NXC= 100000	L\$BLK 000262	L\$SER 000230	L.STBL 000070
I.OFF = 000024	LP\$TRB= 000002	L\$BSA 000122	L\$LEN 000074	L.STRC 000050
KISAR6= *****	LP\$UNT= 000001	L\$BSD 000123	L\$SLT 000042	L.STRM 000051
K\$CNT= 177546	LP\$WCN= 000040	L\$BSI 000124	L\$SNM 000046	L.STS 000002
K\$CSR= 177546	LP\$WDV= 000020	L\$BUF 000060	L\$STA 000100	L.ST2 000003
K\$SLDC= 000000	LP\$WLD= 000360	L\$CHN 000054	L\$TAD 000103	L.TBP 000004
K\$STPS= 000074	LP\$WTR= 000200	L\$CMB 000234	L\$TH1 000130	L.TIMC 000060
LC\$EXT 000000	LP\$WUN= 000100	L\$COS 000101	L\$TH2 000131	L.TIMI 000001
LC\$INT 000001	LS\$ACT= 000040	L\$CTL 000053	L\$TH3 000132	L.TIMR 000000
LC\$NTL= 000200	LS\$BBT= 010000	L\$CTL 000002	L\$TNM 000052	L.TOR 000064
LC\$OWN= 000400	LS\$BLK= 001000	L\$CUS 000260	L\$TPT 000050	L.UNT 000013
LD\$LP = 000000	LS\$BSA= 000001	L\$DDM 000000	L\$TRB 000040	L.XSET 000020
LE.NRH= 000200	LS\$BSD= 000002	L\$DDT 000106	L\$TYP 000063	MB\$DIS 000001
LE.NRO= 000001	LS\$BSI= 000004	L\$DEA 000105	L\$UNT 000003	MB\$ENA 000000
LE.NSH= 000002	LS\$CHN= 000001	L\$DLT 000110	L\$XCH 000232	MB\$FUL 000002
LE.NSO= 000020	LS\$CMB= 000002	L\$DTE 000240	L\$XMT 000120	MB\$MIX 000002
LE.RCO= 000040	LS\$COS= 000004	L\$DTL 000236	L\$ASG= 000000	MB\$ONE 000001
LE.SAE= 000004	LS\$CUS= 000004	L\$DTEP 000250	L\$DRV= 000000	MB\$RXO 000001
LE.STT= 000010	LS\$DDT= 001000	L\$FLG 000064	L\$P11= 000001	MB\$TXO 000000
LE.XTU= 000100	LS\$DEA= 000100	L\$FLX 000076	L\$P11R= 000000	MB\$ZER 000000
LF\$MLT= 040000	LS\$DLM= 001004	L\$FL1 000066	L.BABL 000062	MC\$BAB 000073
LF\$REA= 000001	LS\$DLT= 002000	L\$FL2 000070	L.BUFU 000052	MC\$BID 001765
LF\$SEG= 100000	LS\$DTE= 000010	L\$HBT 000254	L.CHA 000034	MC\$BMC 001767
LF\$SKP= 000004	LS\$HBT= 000400	L\$HTM 000226	L.CNTL 000024	MC\$BSC 001766
LF\$VR2= 000010	LS\$HTM= 010000	L\$INA 000125	L.COST 000015	MC\$CAC 001442
LF\$ZER= 000002	LS\$INA= 000010	L\$IND 000126	L.CRC 000030	MC\$CAP 001440
LF.ACT= 100000	LS\$IND= 000020	L\$INI 000127	L.CRS 000040	MC\$CCL 001445
LF.BRO= 000400	LS\$INI= 000040	L\$ICT 000224	L.CTL 000012	MC\$CDC 002045
LF.BWT= 000007	LS\$LCT= 020000	L\$LEN 000264	L.CVA 177776	MC\$CDP 001441
LF.ENA= 002000	LS\$LMB= 000002	L\$LMB 000234	L.DDM 000002	MC\$CIF 001465

CIRMAP      CREATED BY MACRO ON 29-JUN-85 AT 12:20      PAGE 9      E 6

MACRO CROSS REFERENCE

CREF    04.00

MACRO NAME      REFERENCES

.UNB	#5-66	5-66
.UNW	#5-66	
.VFY	#5-66	
.X2CHB	#5-66	
.X2CHW	#5-66	
.X3CHB	#5-66	
.X3CHW	#5-66	

CIZEIN - CIRCUIT ZERO COUNTERS MACRO V05.03b Saturday 29-Jun-85 <sup>E 7</sup> 12:20 Page 6-5  
Symbol table

. ABS. 000264 000 (RW,I,GBL,ABS,QVR)  
000202 001 (RW,I,LCL,REL,CON)  
Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 209  
Work file writes: 143  
Size of work file: 28869 Words ( 113 Pages)  
Size of core pool: 17608 Words ( 67 Pages)  
Operating system: RSX-11M/PLUS

Elapsed time: 00:00:24.33  
SY:CIZEIN.V2,[135,134]CIZEIN/CR/~SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]CIZEIN

DACOU - READ/AND OR ZERO DA COU MACRO V05.03b Saturday 29-Jun-85 12:20 Page 9  
DATB? - DA COUNTER TABLES

84  
85  
86  
87  
88 000000  
89 000004  
90  
91  
92  
93 000006  
94 000012  
95 000016  
96 000022  
97 000026

```
.SBTTL  DATB? - DA COUNTER TABLES
;
; DA TABLE 0 - NETWORK MANAGEMENT LAYER (DA LINE TABLE)
DATB0:  DLCOU$  0,16.,T.TLZ,R0      ; SECONDS SINCE LAST ZEROED
        DLCOU$  END
;
; DA TABLE 1 - DATA LINK LAYER (DA LINE TABLES)
DATB1:  DLCOU$  1000.,32.,T.RCVB,R0 ; BYTES RECEIVED
        DLCOU$  1001.,32.,T.XMTB,R0 ; BYTES SENT
        DLCOU$  1010.,32.,T.RCV,R0  ; DATA BLOCKS RECEIVED
        DLCOU$  1011.,32.,T.XMT,R0  ; DATA BLOCKS SENT
        DLCOU$  END
;
```



DCPCOU - READ/AND OR ZERO DCP C MACRO V05.03b Saturday 29-Jun-85 <sup>F 9</sup> 12:21 Page 5  
MACRO CALLS AND LOCAL DEFINITIONS

49  
50  
51  
52  
53  
54  
55  
56  
57

000000

```
      .SBTTL  MACRO CALLS AND LOCAL DEFINITIONS
      :
      : MACRO LIBRARY CALLS
      :
      .MCALL  SAVMAP,MAP,BIAS,RESMAP,SAVRG,RESRG,CALLR,DLCOU$
      .MCALL  DDCDF$,CIRCX$
      DDCDF$      ; DEFINE DDCMP SYMBOLS
```

DCPCOU      CREATED BY MACRO ON 29-JUN-85 AT 12:21      PAGE 4      E 10  
SYMBOL CROSS REFERENCE      CREF    04.00  
SYMBOL    VALUE      REFERENCES

\$\$WID    = 020000	9-126	#9-127	9-127	#9-128	9-128	#9-131	9-131	#9-132	9-132
	#9-133	9-133	#9-134	9-134					
	#9-87	9-87	#9-88	9-88	#9-94	9-94	#9-95	9-95	#9-96
	9-96	#9-97	9-97	#9-98	9-98	#9-103	9-103	#9-108	9-108
	#9-109	9-109	#9-110	9-110	#9-114	9-114	#9-118	9-118	#9-119
	9-119	#9-124	9-124	#9-130	9-130				

DLCCOU - READ AND ZERO DLC PRO MACRO V05.03b Saturday 29-Jun-85 12:22 Page 5

Macro calls and local definitions

```
47      .SBTTL Macro calls and local definitions
48
49      ;; Macro library calls
50      ;;
51      .MCALL CCBDF$,PDVDF$,MANDF$,RETC,MAP,SLTDF$
52      .MCALL SAVMAP,RESMAP,BIAS,SAVRG,RESRG,CIRCX$
53
54      CCBDF$      ; Define CCB offsets
55      PDVDF$      ; Define PDV offsets
56      MANDF$      ; Define Network Management symbols
57      SLTDF$      ; Define SLT stuff
58
```

MO\$NIC	000023	MP\$CNU	001753	MP\$LAN	000234	MP\$NRA	006334	MP\$SER	000144
MO\$NOD	000000	MP\$COB	000311	MP\$LAR	000202	MP\$NRB	000214	MP\$SET	000000
MO\$OFF	000001	MP\$CON	002126	MP\$LAS	000012	MP\$NSA	001617	MP\$SGZ	001644
MO\$ON	000000	MP\$COS	001604	MP\$LBS	000203	MP\$NTI	002141	MP\$SID	000176
MO\$OPT	000001	MP\$CPF	000230	MP\$LCO	000226	MP\$NUM	001642	MP\$SIN	000310
MO\$PER	000200	MP\$CPL	000232	MP\$LCT	000156	MP\$NVE	001274	MP\$SLI	000156
MO\$PRO	000002	MP\$CPT	000226	MP\$LHL	000232	MP\$NXN	001476	MP\$SLO	000171
MO\$PRS	000301	MP\$CPU	000161	MP\$LLE	000227	MP\$OAC	000632	MP\$SMX	002202
MO\$REA	000200	MP\$CSZ	001755	MP\$LLO	004432	MP\$OAN	000620	MP\$SND	000500
MO\$SET	000000	MP\$CUS	002127	MP\$LMB	002152	MP\$OCO	000776	MP\$SNP	006332
MO\$STA	000020	MP\$CVA	000540	MP\$LMX	002200	MP\$OHO	000214	MP\$SNU	000542
MO\$SSM	000000	MP\$DAL	002570	MP\$LNA	000144	MP\$ONA	000764	MP\$SOB	000524
MO\$TSK	000000	MP\$DCO	001464	MP\$LNO	000233	MP\$UNR	002114	MP\$SPA	000157
MO\$VOL	000000	MP\$DDT	002177	MP\$LOA	000170	MP\$SQL	001453	MP\$SPR	000536
MO\$ZER	000000	MP\$DEL	001131	MP\$LOG	004514	MP\$OTI	000777	MP\$SPS	000513
MP\$ACB	000012	MP\$DES	000156	MP\$LOO	000620	MP\$QTY	001022	MP\$STA	000000
MP\$ACC	000514	MP\$DEV	002114	MP\$LTM	001613	MP\$OUS	000777	MP\$STI	002140
MP\$ACT	004526	MP\$DFA	001320	MP\$LTY	004533	MP\$QVE	001010	MP\$STT	002201
MP\$ADD	000766	MP\$DHO	001465	MP\$LWI	000230	MP\$OWN	004374	MP\$STY	000175
MP\$ADJ	001440	MP\$DIA	000173	MP\$MAC	004420	MP\$PAR	000036	MP\$SUB	000001
MP\$ADP	006325	MP\$DLB	002571	MP\$MAD	001630	MP\$PAS	000513	MP\$SUR	000156
MP\$ADS	004406	MP\$DLG	004521	MP\$MAP	006323	MP\$PCH	002152	MP\$SUS	000512
MP\$ALB	000036	MP\$DLI	001466	MP\$MAR	001635	MP\$PCO	000024	MP\$SVR	000163
MP\$AMC	001640	MP\$DLT	002200	MP\$MAV	006321	MP\$PCT	000144	MP\$SWI	002260
MP\$AMH	001641	MP\$DRO	001441	MP\$MBN	001636	MP\$PDT	002114	MP\$SYP	002424
MP\$ANB	004420	MP\$DST	000454	MP\$MBR	001637	MP\$PHT	000170	MP\$TFL	000156
MP\$ASB	000024	MP\$DTE	002140	MP\$MBU	001642	MP\$PHY	000012	MP\$TH1	002206
MP\$ASC	004432	MP\$DTY	001452	MP\$MCB	000156	MP\$PLI	000025	MP\$TH2	002205
MP\$SAUS	000512	MP\$DUA	000207	MP\$MCO	001632	MP\$PLN	002140	MP\$TH3	002202
MP\$BBT	002165	MP\$DUC	000210	MP\$MDE	004421	MP\$PLO	000012	MP\$TLN	000202
MP\$BDF	002164	MP\$DUM	000202	MP\$MHO	001633	MP\$PMC	004374	MP\$TLO	000172
MP\$BFQ	002121	MP\$DUP	002127	MP\$MLB	000202	MP\$PNT	002126	MP\$TPA	004375
MP\$BLK	001616	MP\$DVC	002114	MP\$MLK	001306	MP\$PRI	004411	MP\$TRI	002164
MP\$BLO	001452	MP\$DWE	001321	MP\$MLN	001631	MP\$PRO	002130	MP\$TST	000144
MP\$BMX	002176	MP\$ELT	000157	MP\$MLP	006333	MP\$PSS	001763	MP\$TYP	002130
MP\$BNP	006330	MP\$ETY	001605	MP\$MRB	002171	MP\$PST	001762	MP\$UCS	004407
MP\$BRT	001620	MP\$EVE	000311	MP\$MRO	001605	MP\$RET	001651	MP\$USR	001750
MP\$BSA	002176	MP\$FNC	001752	MP\$MRP	006322	MP\$RFA	001323	MP\$VEC	004410
MP\$BSD	002203	MP\$GDT	002222	MP\$MRT	002153	MP\$RMX	002201	MP\$VER	004406
MP\$BSI	002200	MP\$GNM	002223	MP\$MRV	006320	MP\$RPA	004374	MP\$WDF	002165
MP\$BSP	006331	MP\$GRO	002115	MP\$MSB	000170	MP\$RPR	001606	MP\$WMX	002177
MP\$BUF	000170	MP\$GRP	000541	MP\$MVE	000145	MP\$RRT	002213	MP\$XMT	002166
MP\$BUP	006324	MP\$GTY	002224	MP\$MWI	001634	MP\$RST	002212	MP\$XPF	000242
MP\$BUS	001643	MP\$HAD	001757	MP\$MVR	001754	MP\$RSV	001754	MP\$XPL	000244
MP\$CAC	001750	MP\$HBT	002142	MP\$MWN	002154	MP\$RSZ	001756	MP\$XPT	000240
MP\$CAS	001762	MP\$HDD	000162	MP\$MXB	002172	MP\$RTI	001616	MP\$XXX	177777
MP\$CAT	002210	MP\$HTM	001612	MP\$MXC	000466	MP\$RTM	001611	MP\$SST	004406
MP\$CCS	004406	MP\$HWA	002210	MP\$MXR	001630	MP\$RVE	001604	MP\$SCT	000001
MP\$CHN	002141	MP\$HAT	001322	MP\$MXW	002143	MP\$RVT	000156	MP\$SAD	000010
MP\$CLR	000144	MP\$IDE	000144	MP\$NAA	006335	MP\$SAC	000514	MP\$ALO	000007
MP\$CLT	002131	MP\$IDP	006327	MP\$NAC	001130	MP\$SAD	000543	MP\$ASE	000006
MP\$CLN	002126	MP\$IHO	000215	MP\$NAP	006326	MP\$SCA	000310	MP\$ATR	000011
MP\$CLT	002211	MP\$INA	002177	MP\$NCT	000240	MP\$SCO	000144	MP\$AUT	000000
MP\$CMB	002142	MP\$IND	002204	MP\$NET	002114	MP\$SCT	002176	MP\$CLE	000003
MP\$CMK	000537	MP\$INI	002201	MP\$NLI	000765	MP\$SDU	000203	MP\$DED	000004
MP\$CMX	002153	MP\$ITI	000776	MP\$NNA	000764	MP\$SDV	000160	MP\$DIE	000003
MP\$CND	000310	MP\$LAA	000231	MP\$NOD	000500	MP\$SEH	004401	MP\$DUM	000004

DLMCOU - READ/AND OR ZERO DLM C MACRO V05.03b Saturday 29-Jun-85 12:22 Page 6-1  
CONTEXT AREA DEFINITIONS

000002	B\$7:	.BLKB	1	:	BASE TABLE + 7
000003	B\$10:	.BLKB	1	:	BASE TABLE + 10
000004	B\$11:	.BLKB	1	:	BASE TABLE + 11
000005	B\$12:	.BLKB	1	:	BASE TABLE + 12
000006	B\$7\$10:	.BLKB	1	:	SUM OF BASE TABLE 7 AND 10
		.EVEN			
000000		.PSECT			

DLMCOU CREATED BY MACRO ON 29-JUN-85 AT 12:23 PAGE 3 E 14  
 SYMBOL CROSS REFERENCE CREF 04.00

SYMBOL	VALUE	REFERENCES
L\$PRO	000067	#6-65
L\$PVC	000004	#6-65
L\$SCN	000020	#6-65
L\$SCR	000072	#6-65
L\$SLEN	000066	#6-65
L\$SLT	000042	#6-65 11-150
L\$SNM	000046	#6-65
L\$SYL	000122	#6-65
L\$TNM	000052	#6-65
L\$TPT	000050	#6-65
L\$TRB	000040	#6-65 11-178
L\$TSZ	000070	#6-65
L\$TYP	000063	#6-65
L\$UNT	000003	#6-65
L.COST	000015	#5-59
L.CTL	000012	#5-59
L.CVA	177776	#5-59
L.DDM	000002	#5-59
L.DDS	000004	#5-59
L.DLC	000003	#5-59 11-156
L.DLM	000006	#5-59 11-158
L.DLS	000010	#5-59 11-159
L.FLG	000000	#5-59 11-151
L.KRBA	000016	#5-59
L.LEN	= 000022	#5-59
L.MPF	000022	#5-59
L.NMST	000020	#5-59
L.NSTA	000014	#5-59
L.OWNR	000021	#5-59
L.UNIT	000013	#5-59
MT\$ASC	000100	5-57
MT\$COD	000200	5-57 5-57
MT\$MUL	000100	5-57
M\$MGE	= 000000	11-161 11-164 11-172 11-175
N\$SVCT	= *****	10-108 10-123 11-158
Q\$TRHD	= 000006	11-168
P\$VID	= *****	11-154
Q\$STN	= 000002	11-178
Q\$TIMZ	= 000036	9-86
R\$PRO	= *****	8-72
R\$RTR	= *****	8-72
R\$11D	= *****	5-60
R\$11M	= 000000	5-60 11-164 11-175
R\$11S	= *****	5-60 8-72
SF.ACT	= 000200	#5-59
SF.ENA	= 000100	#5-59
SF.LPB	= 000004	#5-59
SF.MFL	= 000040	#5-59
SF.PAC	= 000020	#5-59
SF.REA	= 000010	#5-59
SF.SER	= 000001	#5-59
SF.SVC	= 000002	#5-59

```

148
149 000052          10$:  QIOW$$ RO,#$TMLUN,$$TMEFN,,#IOSB,,<R3,R2,R1> ; ISSUE I/O
150
151                .IFF ;NDF M$$ACP
152
153          10$:  QIO$$ RO,#$TMLUN,,,R5,$DLXAST,<R3,R2,R1> ; ISSUE I/O
154
155                .IFTF ;NDF M$$ACP
156
157 000116 103010    BCC 20$ ; IF CC, DIRECTIVE SUCCEEDED
158 000120 026727 000000G 000000G  $DSW,#1E.UPN ; ELSE WAS IT A RESOURCE ERROR ?
159 000126 001023    BNE 40$ ; IF NE, NO - REAL ERROR
160 000130          WSIG$$ ; ELSE, WAIT AROUND A WHILE
161 000136 000745    BR 10$ ; AND TRY IT AGAIN
162 000140          20$:  .IFT ;NDF M$$ACP
163
164          000140 116701 177634    MOVB IOSB,R1 ; GET STATUS RETURN
165
166
167                .IFF ;NDF M$$ACP
168
169          CALL FORK ; FORK AND WAIT FOR QIO COMPLETION
170          MOVB STATUS,R1 ; GET THE STATUS RETURN
171
172          .ENDC ;NDF M$$ACP
173
174
175 000144 003014    BGT 40$ ; IF GT, SUCCESS
176 000146 012700    MOV #DLXERR,R0 ; POINT TO ASCII ERROR CODE BUFFER
177 000152 005002    CLR R2 ; ENABLE ZERO SUPPRESSION
178 000154          CALL $CBDSG ; CONVERT IT TO SIGNED DECIMAL
179 000160 012701 000005'    MOV #DLXTXT,R1 ; POINT TO ERROR TEXT
180 000164 160100    SUB R1,R0 ; CALC STRING LENGTH
181 000166 110041    MOVB R0,-(R1) ; SET STRING LENGTH
182 000170 010164 000056    MOV R1,L$MSG(R4) ; SET ERROR MESSAGE ADDRESS
183 000174 000261    SEC ; ELSE, NO
184 000176          40$:  RETURN

```

70  
 71  
 72  
 73  
 74  
 75 000000

.SBTTL CONTEXT AREA OFFSET DEFINITIONS

CONTEXT AREA OFFSET DEFINITIONS

CICCX\$ LIST

CONTEXT AREA OFFSET DEFINITIONS

000000  
 000000  
 000020

.ASECT

= 0

L\$NLEN = 16. ; MAXIMUM NAME LENGTH

The offsets L\$NAM to L\$PDV inclusive must appear in the same order  
 as in the CIRCX\$ and LOCCX\$ macros.

000000  
 000000  
 000002  
 000003  
 000004

000020

L\$NAM: ;  
 L\$DDM: .BLKW 1 ; DEVICE NAME  
 L\$CTL: .BLKB 1 ; CONTROLLER NUMBER  
 L\$UNT: .BLKB 1 ; UNIT NUMBER  
 L\$PVC: .BLKW 1 ; 3RD WORD OF PVC NAME  
 ; = 0+L\$NLEN ; SPACE FOR EXPANDED CIRCUIT NAME  
 L\$SCN: .BLKB L\$NLEN ; CURRENT NAME IN WILDCARD SCAN  
 L\$TRB: .BLKB 1 ; TRIBUTARY NUMBER  
 L\$PFG: .BLKB 1 ; PARSE FLAGS  
 L\$SLT: .BLKW 1 ; Current SLT/PVC address  
 L\$NXT: .BLKW 1 ; Pointer to next SLT/PVC address  
 L\$SNM: .BLKW 1 ; REMAINING NUMBER OF SYSTEM LINES  
 L\$TPT: .BLKW 1 ; Current tributary pointer (-1 for PSI)  
 L\$TNM: .BLKB 1 ; REMAINING NUMBER OF TRIBUTARIES  
 L\$CTB: .BLKB 1 ; CURRENT TRIBUTARY NUMBER  
 L\$CHN: .BLKB 1 ; Channel number / X.25 port number and  
 ; PDV assigned  
 L\$PDV: .BLKB 1 ;  
 L\$MSG: .BLKW 1 ; ERROR MESSAGE STRING POINTER  
 L\$BUF: .BLKW 1 ; SAVED BUFFER POINTER  
 L\$OPT: .BLKB 1 ; SAVED OPTIONS BYTE  
 L\$TYP: .BLKB 1 ; CIRCUIT-ID FORMAT TYPE  
 L\$FLG: .BLKW 1 ; FLAG WORD (FOR COMMAND)  
 L\$FL1: .BLKW 1 ; FLAG WORD (FOR COMMAND)  
 L\$FL2: .BLKW 1 ; FLAG WORD (FOR CURRENT CIRCUIT)  
 L\$PAR: .BLKW 1 ; CURRENT PARAMETER TYPE  
 L\$LEN: .BLKB 1 ; Significant length of circuit name  
 L\$PRO: ; Line protocol  
 L\$MTYP: .BLKB 1 ; Network management circuit type  
 L\$FLX: .BLKW 1 ; Flags word for X.25 circuit commands  
 L\$STA: .BLKB 1 ; CIRCUIT STATE  
 L\$COS: .BLKB 1 ; CIRCUIT COST  
 L\$OWN: .BLKB 1 ; CIRCUIT OWNER (PDV INDEX)  
 L\$TAD: .BLKB 1 ; TRIBUTARY ADDRESS  
 L\$ACT: .BLKB 1 ; MULTIPOINT ACTIVE RATIO  
 L\$DEA: .BLKB 1 ; MULTIPOINT DEAD RATIO  
 L\$DDT: .BLKW 1 ; DMP DEAD TIMER  
 L\$DLT: .BLKW 1 ; DMP DELAY TIMER  
 L\$PLT: .BLKW 1 ; DMP POLL TIMER  
 L\$BBT: .BLKW 1 ; DMP BABBLE TIMER  
 L\$NMT: .BLKW 1 ; DMP NORMAL TIMER  
 L\$XMT: .BLKW 1 ; DMP TRANSMIT TIMER



```

66                                     .SBTTL DISPATCH TABLE FOR READ PARAMETERS OPTIONS
67                                     ;
68                                     ; DISPATCH TABLE FOR READ OPTIONS
69                                     ;
70 000000                                DISTBL:
71                                     .IF NDF R$$$11S
72 000000 000040 000000G                .WORD MOSCHA,CIRECH                ; READ CHARACTERISTICS
73                                     .ENDC
74 000004 000060 000000G                .WORD MOSCOU,CIRECO                ; READ/ZERO COUNTERS
75 000010 000020 000000G                .WORD MOSSTA,CIREST                ; READ STATUS
76 000014 000000 000000G                .WORD MOSSUM,CIREST                ; READ SUMMARY (SAME AS STATUS)
77 000020 177777                        .WORD -1                          ; END OF TABLE

```

\*\*FILE\*\*ID\*\*CIREST

```

CCCCCCCC  IIIIII  RRRRRRR  EEEEEEEEE  SSSSSSS  TTTTTTTTT
CCCCCCCC  IIIIII  RRRRRRR  EEEEEEEEE  SSSSSSS  TTTTTTTTT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RRRRRRR  EEEEEEE  SSSSSS  TT
CC         II      RRRRRRR  EEEEEEE  SSSSSS  TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CC         II      RR      EE      SS      TT
CCCCCCCC  IIIIII  RR      EEEEEEEEE  SSSSSSS  TT
CCCCCCCC  IIIIII  RR      EEEEEEEEE  SSSSSSS  TT

```

```

....
....
....
....

```

```

LL          SSSSSSS  TTTTTTTTT
LL          SSSSSSS  TTTTTTTTT
LL          SS      TT
LL          SS      TT
LL          SS      TT
LL          SS      TT
LL          SSSSSS  TT
LL          SSSSSS  TT
LL          SS      TT
LL          SS      TT
LL          SS      TT
LL          SS      TT
LLLLLLLLLL  SSSSSSS  TT
LLLLLLLLLL  SSSSSSS  TT

```

```

492          .SBTTL FNDPLD - Find physical link data base
493      +
494      ***FNDPLD-FIND PHYSICAL LINK DATA BASE FOR A LINE
495
496      INPUTS:
497          R4 = ADDRESS OF CONTEXT BLOCK
498
499      OUTPUTS:
500          R1 = ADDRESS OF PLD FOR THE LINE
501          IF CS, LINE IN NOT OWNED BY TRANSPORT
502      -
503
504      FNDPLD:
505          SWSTK$ 20$                ;; ENTER SYSTEM STATE
506          MOV    #*RXPT,R2         ;; SET XPT'S NAME IN RAD50
507          CALL   @PDVID            ;; GET IT'S PDV INDEX      ; RJK05
508          BCS    10$               ;; IF CS, XPT NOT IN SYSTEM ;**-1
509          CMPB   R2,L$PDV(R4)      ;; OWNED BY XPT ?
510          BNE    10$               ;; IF NE, NO
511          ADD    @PDVTA,R2         ;; POINT INTO PDV TABLE      ; RJK05
512          MOV    (R2),R2           ;; GET PDV ADDRESS          ;**-1
513          MOV    Z,DAT(R2),R5      ;; POINT TO XPT'S DATA BASE
514          BEQ    10$               ;; BR IF XPT NOT LOADED
515          TST    N$PLD+2(R5)       ;; IS THE EXEC ON?
516          BEQ    10$               ;; IF EQ, NO PLD
517          MOVB   L$CHN(R4),R1      ;; GET THE CHANNEL NUMBER ASSIGNED
518          ASL    R1                ;; MAKE IT A WORD INDEX
519          ADD    N$PLD+2(R5),R1    ;; POINT TO ADDRESS OF PLB
520          MOV    (R1),4(SP)        ;; RETURN PLB ADDRESS IN SAVED R1
521          BR     20$              ;; RETURN
522
523          10$: RETC                ;; SET USER C-BIT
524          20$: RETURN
525

```

CIREST      CREATED BY    MACRO    ON 25-JUL-85 AT 15:36      PAGE 6      F 4  
 MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME	REFERENCES
ADJDF\$	#5-62      5-71
ASL\$	#5-62      7-268
BIAS	#5-61      7-269      8-326      8-329
CALL	7-195      7-201      7-203      7-234      7-238      7-253      7-271      7-280      7-288
	7-294      8-313      8-318      9-352      9-355      10-430      10-440      12-505      12-507      13-551
	13-553      13-566
CALLR	7-167
CEACC\$	#5-61      13-566
CIRCX\$	#5-62      5-73
DHBD\$	#5-62      5-72
ECDD\$	#5-61      5-68
MAND\$	#5-60      5-64
MAP	#5-61      8-322      9-363      9-377
MESAG\$	#5-61
PDVDF\$	#5-60      5-65
PHBDF\$	#5-60      5-66
PLBDF\$	#5-62      5-70
RESMAP	#5-61      8-331      9-383
RESRG	#5-60
RET\$	#5-61      9-381      12-523      13-572
RETURN	7-296      8-332      9-384      10-452      11-486      12-524      13-573      13-582
SAVMAP	#5-61      8-314      9-353
SAVRG	#5-60
SLTDF\$	#5-60      5-67
SWSTK\$	8-313      9-352      12-505      13-551
XPDD\$	#5-62      5-69

MC\$CLD	001464	MC\$TIM	000000	MD\$KID	000036	ME.FOP	177763	MOSALI	000000
MC\$COU	100000	MC\$TYP	007777	MD\$KIL	000040	ME.FOR	177776	MOSCHA	000040
MC\$CTL	001454	MC\$SUBU	002052	MD\$KMX	000054	ME.FUN	177777	MOSCIR	000003
MC\$CTR	001452	MC\$UFD	002047	MD\$KMY	000052	ME.GRO	177745	MOSCLE	000100
MC\$CTS	001453	MC\$UMR	001132	MD\$LEN	000050	ME.HAR	177750	MOSCOU	000060
MC\$DOV	002050	MC\$UMS	001133	MD\$PCL	000011	ME.IID	177767	MOSDAC	000000
MC\$SLBR	001750	MC\$VAX	000003	MD\$QNA	000005	ME.LCO	177766	MOSDEF	000000
MC\$SLBS	001751	MC\$WID	060000	MD\$UNA	000001	ME.LPR	177757	MOSDPR	000000
MC\$LDI	001774	MC\$WIH	040000	MD\$WIT	000002	ME.MPR	177773	MOSENT	000017
MC\$LDO	001775	MC\$WIL	020000	MD.ABO	000017	ME.MVE	177771	MOS EVE	000100
MC\$SLDR	001762	MC\$WOB	020000	MD.ACC	000010	ME.OPE	177747	MOSINF	000160
MC\$LDS	001763	MC\$W16	040000	MD.AOB	000016	ME.PLO	177751	MOSINS	000002
MC\$LLB	002021	MC\$W32	060000	MD.BOB	000011	ME.PMI	177743	MOSLIN	000001
MC\$LLP	002115	MC\$XBR	001750	MD.DIA	000007	ME.PNA	177752	MOSLOG	000001
MC\$LLR	002007	MC\$XBS	001751	MD.DOB	000015	ME.PRI	177775	MOSMIR	000031
MC\$LOO	000001	MC\$XCJ	000322	MD.DUM	000002	ME.PTY	177772	MOSNAM	000001
MC\$LRB	002020	MC\$XCR	002260	MD.FAI	000014	ME.PVA	177760	MOSNIC	000023
MC\$LRP	002114	MC\$XCS	002261	MD.FNA	000001	ME.RES	177761	MOSNOD	000000
MC\$LRR	002006	MC\$XDR	001762	MD.FOB	000006	ME.ROO	177754	MOSOFF	000001
MC\$LSI	002032	MC\$XDS	001763	MD.LOA	000001	ME.SIZ	177774	MOSON	000000
MC\$LST	002033	MC\$XFR	002272	MD.LSH	000020	ME.SYS	177746	MOSOPT	000001
MC\$LUP	006072	MC\$XFS	002273	MD.NOB	000012	ME.UCO	177770	MOSPER	000200
MC\$MAP	010000	MC\$XLJ	000323	MD.NON	177777	MF\$ACT	177776	MOSPRO	000002
MC\$MBL	001764	MC\$XLR	002330	MD.PER	000000	MF\$ADD	000000	MOSPRS	000001
MC\$MBX	004420	MC\$XMA	000310	MD.RES	000004	MF\$ADJ	177774	MOSREA	000200
MC\$MBY	001752	MC\$XMC	002305	MD.ROB	000005	MF\$ALL	177775	MOSSET	000000
MC\$MPX	004406	MC\$XMS	002304	MD.RSH	000013	MF\$BYE	000300	MOSSTA	000020
MC\$NAP	001604	MC\$XNR	002332	MD.SDU	000005	MF\$CHA	000023	MOSSUM	000000
MC\$NBR	001130	MC\$XRC	002316	MD.SLO	000003	MF\$DUM	000020	MOSTSK	000000
MC\$NBS	001131	MC\$XRR	002331	MD.SNA	000000	MF\$EVT	000001	MOSVOL	000000
MC\$NCR	001154	MC\$XRS	002342	MD.TLO	000004	MF\$FUP	000264	MOSZER	000000
MC\$NCS	001155	MC\$QZ0	000002	MD.UNA	000002	MF\$KNO	177777	MP\$ACB	000012
MC\$NML	001274	MD\$CI	000007	MD.LNR	000003	MF\$LOA	000017	MP\$ACC	000514
MC\$NMR	001142	MD\$CNA	000003	MD.UOB	000007	MF\$LOD	177775	MP\$ACT	004526
MC\$NMS	001143	MD\$COU	000001	MD.VOL	000006	MF\$REA	000024	MP\$ADD	000766
MC\$NNO	001606	MD\$DA	000010	ME\$ALI	000010	MF\$SIG	177773	MP\$ADJ	001440
MC\$NNU	001605	MD\$DL	000004	ME\$AL2	000003	MF\$SPF	000302	MP\$ADP	006325
MC\$NOP	001607	MD\$DLV	000020	ME\$ARE	000005	MF\$SYS	000026	MP\$ADS	004406
MC\$NOR	000000	MD\$DMC	000014	ME\$CIR	000003	MF\$TES	000022	MP\$ALB	000036
MC\$NPF	001616	MD\$DMF	000046	ME\$EXA	000000	MF\$TRA	000301	MP\$AMC	001640
MC\$NPR	001630	MD\$DMP	000022	ME\$EXE	000200	MF\$TRI	000021	MP\$AMH	001641
MC\$NRE	001200	MD\$DMR	000050	ME\$LIN	000001	MF\$ZER	000025	MP\$ANB	004420
MC\$NRT	001166	MD\$DMV	000042	ME\$LOG	000002	ML\$ALL	100000	MP\$ASB	000024
MC\$NVR	001642	MD\$DN	000016	ME\$MOD	000004	ML\$CLS	000000	MP\$ASC	004432
MC\$P08	000000	MD\$DP	000000	ME\$NOD	000000	ML\$COM	000001	MP\$AUS	000512
MC\$P11	000001	MD\$DPV	000044	ME\$NON	177777	ML\$EXT	000001	MP\$BBT	002165
MC\$RFL	002046	MD\$DQ	000006	ME\$OBJ	000007	ML\$FIL	000002	MP\$BDF	002164
MC\$SBU	002051	MD\$DTE	000024	ME\$OB2	000004	ML\$FIR	000000	MP\$BFQ	002121
MC\$SFL	002044	MD\$DU	000002	ME\$PRO	000005	ML\$INT	000000	MP\$BLK	001616
MC\$SYC	000012	MD\$DUP	000012	ME\$SYS	000006	ML\$KNO	140000	MP\$BLO	001452
MC\$SYL	000036	MD\$DV	000026	ME.BLO	177744	ML\$MON	000003	MP\$BMX	002176
MC\$SYR	000050	MD\$DZ	000030	ME.CON	177753	ML\$SYS	000002	MP\$BNP	006330
MC\$SYS	000024	MD\$FUL	000000	ME.CST	177765	ML\$TOP	000001	MP\$BRT	001620
MC\$SYZ	000000	MD\$HAL	000001	ME.DIS	177755	MN\$UNL	000377	MP\$BSA	002176
MC\$TBR	001140	MD\$HEL	000002	ME.DOW	177600	MOSACC	000200	MP\$BSD	002203
MC\$TBS	001141	MD\$KCP	000013	ME.FCO	177762	MOSADD	000002	MP\$BSI	002200
MC\$TDR	002053	MD\$KDP	000034	ME.FIO	177756	MOSALA	000004	MP\$BSP	006331

\*\*\*FILE\*\*ID\*\*CIZEIN

F 6

```

CCCCCCCC      IIIIII      ZZZZZZZZZZ      EEEEEEEEEEE      IIIIII      NN      NN
CCCCCCCC      IIIIII      ZZZZZZZZZZ      EEEEEEEEEEE      IIIIII      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CC           II      ZZ      EE      II      NN      NN
CCCCCCCC      IIIIII      ZZZZZZZZZZ      EEEEEEEEEEE      IIIIII      NN      NN
CCCCCCCC      IIIIII      ZZZZZZZZZZ      EEEEEEEEEEE      IIIIII      NN      NN

```

```

LL      SSSSSSSS      TTTTTTTTTT
LL      SSSSSSSS      TTTTTTTTTT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SSSSSS      TT
LL      SSSSSS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LLLLLLLLLL      SSSSSSSS      TT
LLLLLLLLLL      SSSSSSSS      TT

```

CIZEIN      CREATED BY    MACRO    ON 29-JUN-85 AT 12:20      PAGE 1      F 7

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
CHKCIR	= ***** GX	6-136
CIZEIN	= 000000 RG	#6-96
LC\$NTL	= 000200	#5-67
LC\$OWN	= 000400	#5-67
LF\$MLT	= 040000	#5-67
LF\$REA	= 000001	#5-67      6-104
LF\$SEG	= 100000	#5-67
LF\$SKP	= 000004	#5-67
LF\$VR2	= 000010	#5-67
LF\$ZER	= 000002	#5-67      6-101
LP\$MPT	= 000010	#5-67
LP\$MUX	= 000004	#5-67
LP\$NXC	= 100000	#5-67
LP\$TRB	= 000002	#5-67
LP\$UNT	= 000001	#5-67
LP\$WCN	= 000040	#5-67      5-67
LP\$WDV	= 000020	#5-67      5-67
LP\$WLD	= 000360	#5-67
LP\$WTR	= 000200	#5-67      5-67
LP\$WUN	= 000100	#5-67      5-67
LS\$ACT	= 000040	#5-67
LS\$BBT	= 010000	#5-67
LS\$BLK	= 001000	#5-67      5-67
LS\$BSA	= 000001	#5-67
LS\$BSD	= 000002	#5-67
LS\$BSI	= 000004	#5-67
LS\$CHN	= 000001	#5-67      5-67
LS\$CMB	= 000002	#5-67      5-67      5-67
LS\$COS	= 000004	#5-67
LS\$CUS	= 000004	#5-67      5-67
LS\$DDT	= 001000	#5-67
LS\$DEA	= 000100	#5-67
LS\$DLM	= 001004	#5-67
LS\$DLT	= 002000	#5-67
LS\$DTE	= 000010	#5-67      5-67
LS\$HBT	= 000400	#5-67
LS\$HTM	= 010000	#5-67
LS\$INA	= 000010	#5-67
LS\$IND	= 000020	#5-67
LS\$INI	= 000040	#5-67
LS\$LCT	= 020000	#5-67      5-67
LS\$LMB	= 000002	#5-67
LS\$LOD	= 040000	#5-67
LS\$MDT	= 020000	#5-67
LS\$MRT	= 000020	#5-67
LS\$MWN	= 000040	#5-67
LS\$MXB	= 001000	#5-67
LS\$MXR	= 000020	#5-67      5-67      5-67      5-67
LS\$MXW	= 000040	#5-67      5-67      5-67
LS\$NMT	= 020000	#5-67
LS\$NOR	= 100000	#5-67
LS\$NTI	= 000200	#5-67

```

99          .SBTTL  DACOU - READ AND/OR ZERO DA COUNTERS
100
101      *+
102      **DACOU-READ AND/OR ZERO DA COUNTERS
103      THIS ROUTINE READS AND/OR ZEROS THE LINE AND TRANSPORT COUNTERS
104      FOR A DA LINE.
105
106      INPUTS:
107          R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
108          R4 = ADDRESS OF THE CONTEXT AREA
109
110      OUTPUTS:
111          R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
112
113      REGISTERS:
114          R4 IS PRESERVED
115
116      .ENABL  LSB
117
118      DALIN::  BIT      #LFSVR2,L$FLG(R4)      ; CONNECTED TO VERSION 2.0 NCP ?
119              BEQ      30$                    ; IF EQ, NO - RETURN NO INFORMATION
120
121      DACIR::  SWSTK$   30$                    ;; ENTER SYSTEM STATE
122              SAVMAP   ;; SAVE CURRENT MAPPING
123              MOV      L$SLT(R4),R0           ;; GET THE SLT ADDRESS
124              MAP      L.DLM(R0)              ;; MAP TO THE LINE TABLE
125              MOV      L.DLS(R0),R0           ;; GET LINE TABLE VIRT ADDRESS
126              BEQ      20$                    ;; IF EQ, LINE NOT LOADED - NO COUNTERS
127
128              .IF DF  M$MGE
129              CMP      R0,#120000              ;; MAPPED THROUGH APR 5 ?
130              BLO      10$                    ;; IF LO, NO
131              BIAS     R0                      ;; FORCE APR 6 MAPPING (APR 2 FOR IAS)
132              .ENDC      ; M$MGE
133
134      10$:  MOV      #DATB0,R5                ;; POINT TO FIRST DA TABLE
135              CLR     R2                      ;; RETURN ALL COUNTERS (PT TO PT)
136              CALL    FMTCOU                  ;; GET THE TIME COUNTER
137              CALL    XPTCOU                  ;; GET THE TRANSPORT COUNTERS
138              MOV      #DATB1,R5              ;; POINT TO THE COUNTER TABLE
139              CALL    FMTCOU                  ;; FORMAT THE COUNTERS
140              RESMAP   ;; RESTORE PREVIOUS MAPPING
141              MOV      R3,8.(SP)              ;; RETURN R3 IN SAVED R3
142              RETURN  ;; BACK TO USER STATE AND RETURN
143
144      .DSABL  LSB
145
146      .END

```



```

59          .SBTTL  CONTEXT AREA DEFINITIONS
60
61 000000    CIRCX$ LIST

; CONTEXT AREA OFFSET DEFINITIONS
;
; .ASECT
; = 0
; L$NLEN = 16.          ; MAXIMUM NAME LENGTH
; The offsets L$NAM to L$PDV inclusive must appear in the same order
; as in the CIRCX$ and LDCX$ macros.
;
000000    L$NAM:
000000    L$DDM: .BLKW 1          ; DEVICE NAME
000002    L$CTL: .BLKB 1          ; CONTROLLER NUMBER
000003    L$UNT: .BLKB 1          ; UNIT NUMBER
000004    L$PVC: .BLKW 1          ; 3RD WORD OF PVC NAME
; = 0+L$NLEN          ; SPACE FOR EXPANDED CIRCUIT NAME
000020    L$SCN: .BLKB L$NLEN    ; CURRENT NAME IN WILDCARD SCAN
000040    L$TRB: .BLKB 1          ; TRIBUTARY NUMBER
000041    L$PFG: .BLKB 1          ; PARSE FLAGS
000042    L$SLT: .BLKW 1          ; Current SLT/PVC address
000044    L$NXT: .BLKW 1          ; Pointer to next SLT/PVC address
000046    L$SNM: .BLKW 1          ; REMAINING NUMBER OF SYSTEM LINES
000050    L$TPT: .BLKW 1          ; Current tributary pointer (-1 for PSI)
000052    L$TNM: .BLKB 1          ; REMAINING NUMBER OF TRIBUTARIES
000053    L$CTB: .BLKB 1          ; CURRENT TRIBUTARY NUMBER
000054    L$CHN: .BLKB 1          ; Channel number / X.25 port number and
000055    L$PDV: .BLKB 1          ; ... PDV assigned
000056    L$MSG: .BLKW 1          ; ERROR MESSAGE STRING POINTER
000060    L$BUF: .BLKW 1          ; SAVED BUFFER POINTER
000062    L$OPT: .BLKB 1          ; SAVED OPTIONS BYTE
000063    L$TYP: .BLKB 1          ; LINE-ID FORMAT TYPE
000064    L$FLG: .BLKW 1          ; FLAG WORD
000066    L$SLEN: .BLKB 1          ; Significant length of circuit name
000067    L$PRO: .BLKB 1          ; Line protocol
000070    L$MTYP: .BLKB 1          ; Network management circuit type
000070    L$TSZ: .BLKB 1          ; Block size for transport circuits
000070    L$LTM: .BLKB 1          ; Listen timer for transport circuits
000070    L$FLX: .BLKW 1          ; Flags word for X.25 circuit commands
000072    L$SCR: .BLKW 7          ; SCRATCH BUFFER
000110    L$ADJ: .BLKW 1          ; Pointer to adjacency database
000112    L$NOD: .BLKW 1          ; Adjacent node address
000114    L$COU: .BLKW 1          ; Count of adjacency entries
000116    L$PLB: .BLKW 1          ; PLB address
000120    L$PAR: .BLKW 1          ; PARAMETER TYPE
000122    L$SYL: .BLKW 1          ; System line number
000124    L$LEN: .BLKW 1          ; LENGTH OF CONTEXT AREA
000000    .PSECT

; OFFSETS INTO SCRATCH BUFFER (L$SCR) FOR DMC BASE TABLE COUNTERS
;
000124    .ASECT
000000    .=0
000000    B$5: .BLKB 1          ; BASE TABLE + 5
000001    B$6: .BLKB 1          ; BASE TABLE + 6

```

DCPCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:21      PAGE 5      F 10  
 MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME	REFERENCES
BIAS	#5-53
CALL	10-162    10-164    10-201    10-207    10-209
CALLR	#5-53
CIRCS\$	#5-54    6-61
CDCDF\$	#5-54    5-56
DLBM\$	#9-87    #9-88    #9-89    #9-94    #9-95    #9-96    #9-97    #9-98    9-99    9-100
	9-101    9-102    #9-103    9-104    9-105    9-106    9-107    #9-108    #9-109    #9-110
	9-111    9-112    9-113    #9-114    9-115    9-116    9-117    #9-118    #9-119    9-120
	9-121    9-122    #9-124    9-125    9-126    9-127    9-128    9-129    #9-130    9-131
	9-132    9-133    9-134    9-135    #9-136
DLCOU\$	#5-53    9-87    9-88    9-89    9-94    9-95    9-96    9-97    9-98    9-103
	9-108    9-109    9-110    9-114    9-118    9-119    9-124    9-130    9-136
MAP	#5-53
RESMAP	#5-53    10-212
RESRG	#5-53    10-202
RETURN	10-214
SAVMAP	#5-53    10-163
SAVRG	#5-53    10-171    10-196
SWSTK\$	10-162

```

60                                     .SBTTL Context area definitions
61                                     CIRCX$ LIST
62 000000

; CONTEXT AREA OFFSET DEFINITIONS

000004                                     .ASECT
000000                                     . = 0
000020                                     L$NLEN = 16. ; MAXIMUM NAME LENGTH

; The offsets L$NAM to L$PDV inclusive must appear in the same order
; as in the CIRCX$ and LOCCX$ macros.

000000 L$NAM:
000000 L$DDM: .BLKW 1 ; DEVICE NAME
000002 L$CTL: .BLKB 1 ; CONTROLLER NUMBER
000003 L$UNT: .BLKB 1 ; UNIT NUMBER
000004 L$PVC: .BLKW 1 ; 3RD WORD OF PVC NAME
000020 . = 0+L$NLEN ; SPACE FOR EXPANDED CIRCUIT NAME
000040 L$SCN: .BLKB L$NLEN ; CURRENT NAME IN WILDCARD SCAN
000041 L$TRB: .BLKB 1 ; TRIBUTARY NUMBER
000042 L$PFG: .BLKB 1 ; PARSE FLAGS
000044 L$SLT: .BLKW 1 ; Current SLT/PVC address
000046 L$NXT: .BLKW 1 ; Pointer to next SLT/PVC address
000050 L$SNM: .BLKW 1 ; REMAINING NUMBER OF SYSTEM LINES
000052 L$TPT: .BLKW 1 ; Current tributary pointer (-1 for PSI)
000053 L$TNM: .BLKB 1 ; REMAINING NUMBER OF TRIBUTARIES
000054 L$CTB: .BLKB 1 ; CURRENT TRIBUTARY NUMBER
000055 L$CHN: .BLKB 1 ; Channel number / X.25 port number and
000056 L$PDV: .BLKB 1 ; PDV assigned
000060 L$MSG: .BLKW 1 ; ERROR MESSAGE STRING POINTER
000062 L$BUF: .BLKB 1 ; SAVED BUFFER POINTER
000063 L$OPT: .BLKB 1 ; SAVED OPTIONS BYTE
000064 L$TYP: .BLKB 1 ; LINE-ID FORMAT TYPE
000066 L$FLG: .BLKW 1 ; FLAG WORD
000067 L$SLEN: .BLKB 1 ; Significant length of circuit name
000068 L$PRO: .BLKB 1 ; Line protocol
000069 L$MTYP: .BLKB 1 ; Network management circuit type
000070 L$TSZ: .BLKB 1 ; Block size for transport circuits
000071 L$LTM: .BLKB 1 ; Listen timer for transport circuits
000072 L$FLX: .BLKW 1 ; Flags word for X.25 circuit commands
000073 L$SCR: .BLKW 7 ; SCRATCH BUFFER
000110 L$ADJ: .BLKW 1 ; Pointer to adjacency database
000112 L$NOD: .BLKW 1 ; Adjacent node address
000114 L$COU: .BLKW 1 ; Count of adjacency entries
000116 L$PLB: .BLKW 1 ; PLB address
000120 L$PAR: .BLKW 1 ; PARAMETER TYPE
000122 L$SYL: .BLKW 1 ; System line number
000124 L$LEN: ; LENGTH OF CONTEXT AREA
000000 .PSECT

; OFFSETS INTO SCRATCH BUFFER (L$SCR) FOR DMC BASE TABLE COUNTERS

000124                                     .ASECT
000000                                     . = 0
000001 B$5: .BLKB 1 ; BASE TABLE + 5
000001 B$6: .BLKB 1 ; BASE TABLE + 6

```

MS\$FA1 000013	MT\$DMC 000004	MX\$LCG 000777	PDVTA = ***** GX	X\$\$DBT= 000000
MS\$GLO 000000	MT\$ETH 000006	MX\$LIN 000020	P\$\$P45= 000000	ZF.COU= 001000
MS\$HOL 000002	MT\$HEX 000040	MX\$LOD 000006	P\$\$WRD= 000000	ZF.DDM= 000001
MS\$INA 000002	MT\$LPB 000005	MX\$NMS 000454	Q\$\$OPT= 000010	ZF.DIA= 004000
MS\$LOA 000003	MT\$MAX 000037	MX\$NOD 000006	RQSTCO 000416R	ZF.DLC= 000002
MS\$LOD 000002	MT\$MUL 000100	MX\$OBJ 000006	R\$R0 = ***** GX	ZF.DVP= 100000
MS\$OFF 000001	MT\$NLE 000017	MX\$OWN 000040	R\$R3 = ***** GX	ZF.INI= 040000
MS\$ON 000000	MT\$NON 000001	MX\$PAR 000036	R\$R5 = ***** GX	ZF.KMX= 000020
MS\$PRO 000006	MT\$NR4 000005	MX\$PAS 000010	R\$\$DER= 000000	ZF.LLC= 000004
MS\$REA 000004	MT\$NTY 000060	MX\$RAC 000047	R\$\$K11= 000001	ZF.LMC= 000100
MS\$REF 000001	MT\$OCT 000060	MX\$RID 000047	R\$\$SND= 000000	ZF.MAN= 020000
MS\$RES 000003	MT\$PHA 000002	MX\$RPS 000047	R\$\$TIM= 000000	ZF.MFL= 000010
MS\$RST 000001	MT\$POI 000000	MX\$SID 000040	SF\$ANM 000001	ZF.MTM= 000400
MS\$RSX 000002	MT\$OP2 000010	MX\$SNK 000377	SF\$DNM 000002	ZF.MUX= 000040
MS\$RT 000005	MT\$ROU 000000	MX\$TYP 000077	SF.ACT= 000200	ZF.PSE= 002000
MS\$SER 000002	MT\$RO4 000004	MX\$UID 000020	SF.ENA= 000100	ZF.SLI= 010000
MS\$SHU 000002	MT\$SEC 000000	MX\$CRB= 000124	SF.LPB= 000004	ZF.TIM= 000200
MS\$SRV 000007	MT\$SGD 000020	MX\$CRX= 000000	SF.MFL= 000040	ZF.X3P= 000000
MS\$STA 000000	MT\$SYS 000002	MX\$FCS= 000000	SF.PAC= 000020	ZS.ASN= 100000
MS\$SYN 000012	MT\$TER 000001	MX\$MGE= 000000	SF.REA= 000010	ZS.BSY= 140000
MS\$TER 000001	MT\$TR1 000002	MX\$NET= 000000	SF.SER= 000001	Z.AVL 000014
MS\$TOP 000003	MT\$TYP 007777	MX\$OVR= 000000	SF.SVC= 000002	Z.DAT 000016
MS\$TRI 000005	MT\$USD 000000	NMCRS = ***** GX	SF.UNL= 000040	Z.DSP 000000
MS\$UNR 000005	MT\$X25 000003	NM.CLN 003400	S\$WRG= 000000	Z.FLG 000010
MS\$VMS 000004	MUS\$INC 000001	NM.INI 002400	S\$YSZ= 007600	Z.LEN = 000016
MS.DON 177600	MUS\$OUT 000002	NM.OPR 003000	S.COST 000001	Z.LLN 000006
MS.MOR 000002	MUS\$PER 000000	NM.VR2 002401	S.FLG 000000	Z.MAP 000020
MS.PAR 000003	MV\$11I 000000	NM.VR3 002402	S.LEN 000004	Z.NAM 000004
MS.SUC 000001	MV\$IV 000001	NM\$ACC= 000001	S.NMST 000002	Z.PCB 000012
MT\$AR4 000003	MX\$ACT 000020	NM\$BUF= 000001	S.OWNR 000003	Z.SCH 000007
MT\$ASC 000100	MX\$CIR 000020	NM\$LDV= 000001	TKTCB = ***** GX	\$HEADR= ***** GX
MT\$BIL 000001	MX\$CLN 000020	NM\$MCP= 000001	T\$KMG= 000000	\$PRCCO 000004RG
MT\$BYS 000011	MX\$CNM 000006	NM\$MLL= 000001	T\$MIN= 000000	\$PRLCO 000002RG
MT\$CI 000007	MX\$CON 000006	NM\$MOV= 000010	T.NAM = ***** GX	\$\$\$SYS= 004374
MT\$CLE 000077	MX\$DAC 000020	NM\$NCT= 000001	V\$CTR= 001000	\$\$\$SYX= 000000
MT\$COD 000200	MX\$DTE 000020	NM\$PEM= 000001	XPTCOU= ***** GX	.\$\$\$= 000034
MT\$CON 000001	MX\$FIL 000034			

. ABS. 177776 000 (RW,I,GBL,ABS,OVR)  
 001052 001 (RW,I,LCL,REL,CON)  
 Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 248  
 Work file writes: 178  
 Size of work file: 35691 Words ( 140 Pages)  
 Size of core pool: 17608 Words ( 67 Pages)  
 Operating system: RSX-11M/PLUS

Elapsed time: 00:00:35.44  
 SY:DLCCOU,V2,[135,134]DLCCOU/CR/-SP=SY:[1,1]RSXMCM,SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DLCCOU

```

BIT DEFINITIONS

        .SBTTL  BIT DEFINITIONS
        :
        : PARSE FLAG DEFINITIONS (L$PFG)
        :
000001      L$PUNT = 1      ; UNIT NUMBER FOUND
000002      L$STRB = 2     ; TRIBUTARY NUMBER FOUND
000004      L$PMUX = 4     ; DEVICE IS MUX
000010      L$PMPT = 10    ; LINE IS MULTIPOINT
000020      L$WDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      L$WCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      L$WUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      L$WTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      L$WLD = L$WDV!L$WCN!L$WUN!L$WTR ; WILD CARD FIELD MASK

        :
        : FLAGS WORD BIT DEFINITIONS (L$FLG)
        :
000001      L$SREA = 1     ; READ COUNTERS OPERATION
000002      L$SZER = 2     ; ZERO COUNTERS OPERATION
000004      L$SSKP = 4     ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                        ; THIS IS USED TO FORCE AN EXTRA PASS
                        ; FOR A MULTIPOINT LINE TO RETURN THE
                        ; CONTROLLER COUNTERS AS WELL AS ALL
                        ; OF THE TRIBUTARY COUNTERS.
000010      L$SVR2 = 10    ; CONNECTED TO VERSION 2.0 NCP
000020      L$SEND = 20    ; EXECUTOR IS AN ENDNODE
000040      L$SIG = 40     ; SHOWING SIGNIFIGANT LINES/CIRCUITS
040000      L$MLT = 40000  ; MULTIPLE ADJACENCY FLAG
100000      L$SEEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS

        :
        : BIT POSITION DEFINITIONS
        :
000001      BIT0 = 1
000002      BIT1 = 2
000004      BIT2 = 4
000010      BIT3 = 10
000020      BIT4 = 20
000040      BIT5 = 40
000100      BIT6 = 100
000200      BIT7 = 200
000400      BIT8 = 400
001000      BIT9 = 1000
002000      BIT10 = 2000
004000      BIT11 = 4000
010000      BIT12 = 10000
020000      BIT13 = 20000
040000      BIT14 = 40000
100000      BIT15 = 100000

```

DLMCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:23      PAGE 4      F 14

SYMBOL CROSS REFERENCE      CREF    04.00

SYMBOL	VALUE	REFERENCES
SF.UNL	= 000040	#5-59
\$\$\$BAS	= *****	8-72
S.COST	000001	#5-59
S.FLG	000000	#5-59
S.LEN	000004	#5-59
S.NMST	000002	#5-59
S.OWNR	000003	#5-59
XPTCOU	= *****	10-122
\$\$\$MCB	= *****	5-60
ZF.COU	= 001000	#5-60
ZF.DDM	= 000001	#5-60
ZF.DIA	= 004000	#5-60
ZF.DLC	= 000002	#5-60
ZF.DVP	= 100000	#5-60
ZF.INI	= 040000	#5-60
ZF.KMX	= 000020	#5-60
ZF.LLC	= 000004	#5-60
ZF.LMC	= 000100	#5-60
ZF.MAN	= 020000	#5-60
ZF.MFL	= 000010	#5-60
ZF.MTM	= 000400	#5-60
ZF.MUX	= 000040	#5-60
ZF.PSE	= 002000	#5-60
ZF.SLI	= 010000	#5-60
ZF.TIM	= 000200	#5-60
ZF.X3P	= 000000	#5-60
ZS.ASN	= 100000	#5-60
ZS.BSY	= 140000	#5-60
Z.AVL	000014	#5-60
Z.DAT	000016	#5-60
Z.DSP	000000	#5-60
Z.FLG	= 000010	#5-60
Z.LEN	= 000016	#5-60
Z.LLN	000006	#5-60
Z.MAP	000020	#5-60
Z.NA"	000004	#5-60
Z.PCB	000012	#5-60
Z.SCH	000007	#5-60
\$\$\$BM	= 000000	#9-86
\$\$\$REG	= 000001	#9-86
\$\$\$WID	= 040000	#9-86

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5-60

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#9-86  
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000200  
000200  
000202  
000206 103415  
000230 062704 000166  
000234  
000250 103404  
000252 105764 000003  
000256 100401  
000260 000261  
000262  
000264  
000001

```

.SBTTL DLXLUN - ASSIGN A UN TO NX:
;+
;**-DLXLUN-ASSIGN A LUN TO NX:
;THIS ROUTINE IS CALLED TO ASSIGN $TMLUN TO NX:.
;
;OUTPUTS:
;IF CC, NX: IS LOADED AND ALUN SUCCEEDED.
;ELSE, NX: NOT PRESENT
;
;REGISTERS:
;NO REGISTERS MODIFIED
;-
DLXLUN::
    SAVRG    <R4>                ; SAVE R4
    CALL     DEALUN              ; DEASSIGN THE TEMPORARY LUN
    ALUN$$   #$TMLUN,#'NX        ; TRY TO ASSIGN A LUN TO NX:
    BCS      10$                 ; IF CS, NOT THERE
    ADD      #L$SCR,R4           ; POINT TO SCRATCH BUFFER
    GLUN$$   #$TMLUN,R4         ; GET LUN INFORMATION
    BCS      10$                 ; IF CS, ASSUME NO DLX
    TSTB     3(R4)               ; IS THE DRIVER LOADED ?
    BMI      10$                 ; IF MI, YES
    SEC                      ; ELSE, NO
    10$:     RESRG    <R4>        ; RESTORE R4
    RETURN
;
.END

```

```

000122      L$BSA: .BLKB 1      ; DMP ACTIVE BASE
000123      L$BSD: .BLKB 1      ; DMP DYING BASE
000124      L$BSI: .BLKB 1      ; DMP INACTIVE BASE
000125      L$INA: .BLKB 1      ; DMP ACTIVE INCREMENT
000126      L$IND: .BLKB 1      ; DMP DYING INCREMENT
000127      L$INI: .BLKB 1      ; DMP INACTIVE INCREMENT
000130      L$TH1: .BLKB 1      ; DMP DEAD THRESHOLD
000131      L$TH2: .BLKB 1      ; DMP DYING THRESHOLD
000132      L$TH3: .BLKB 1      ; DMP INACTIVE THRESHOLD
000133      L$MXB: .BLKB 1      ; DMP MAXIMUM BLOCKS
000134      L$NTL: .BLKW 13.    ; NTL MESSAGE BUFFER
000166      L$SCR: .BLKW 15.    ; SCRATCH BUFFER
000224      L$LCI: .BLKW 1      ; COUNTER TIMER
000226      L$HTM: .BLKW 1      ; HELLO TIMER
000230      L$SER: .BLKW 1      ; SERVICE
000230      L$LTM: .BLKW 1      ; LISTEN TIMER
000232      L$XCH: .BLKW 1      ; X25 Logical Channel Number (LCN)
000232      L$LMB: .BLKB 1      ; X25 Max Block (Line)
000234      L$CMB: .BLKW 1      ; X25 Max Data (Circuit)
000236      L$NML: .BLKB 1      ; DLM Number length
000236      L$DTE: .BLKW 1      ; X25 DTE length (Circuit)
000240      L$NUM: .BLKB 8.    ; DLM Number
000240      L$DTE: .BLKB 8.    ; X25 DTE (Circuit)
000250      L$DTEP: .BLKW 1     ; X25 Pointer to DTE descriptor (Circuit)
000252      L$MWN: .BLKB 1      ; X25 Max Window (Line)
000252      L$MXW: .BLKB 1      ; X25 Max Window (Circuit)
000253      L$MRT: .BLKB 1      ; X25 Max Retransmits (Line)
000253      L$MXR: .BLKB 1      ; DLM Max Recalls (Circuit)
000254      L$HBT: .BLKW 1      ; X25 Holdback Timer (Line)
000256      L$NTI: .BLKW 1      ; X25 Retransmit Timer (Line)
000256      L$RET: .BLKW 1      ; DLM Recall Timer (Circuit)
000260      L$CUS: .BLKW 1      ; DLM Usage
000262      L$BLK: .BLKW 1      ; DLM blocking state
          ; IF DF R$$PRO ;PRO/DECnet
          L$LTY: .BLKW 1      ; Loopback Type
          L$MDT: .BLKW 1      ; Modem Test
          .ENDC ; DF R$$PRJ
          .EVEN

000264      L$LEN: .PSECT      ; LENGTH OF CONTEXT AREA
000000

; FLAGS WORD BIT DEFINITIONS (L$FLG)
;
000001      LF$REA = 1      ; READ COUNTERS OPERATION
000002      LF$ZER = 2      ; ZERO COUNTERS OPERATION
000004      LF$SKP = 4      ; SKIP NEXT 'FIND NEXT LINE' OPERATION.
                        ; THIS IS USED TO FORCE AN EXTRA PASS
                        ; FOR A MULTIPOINT LINE TO RETURN THE
                        ; CONTROLLER COUNTERS AS WELL AS ALL
                        ; OF THE TRIBUTARY COUNTERS.
000010      LF$VR2 = 10     ; CONNECTED TO VERSION 2.0 NCP
040000      LF$MLT = 40000  ; MULTIPLE ADJACENCY FLAG
100000      LF$SEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS

; PARSE FLAG DEFINITIONS (L$PFG)
;
000001      LP$UNT = 1      ; UNIT NUMBER FOUND

```



```

79          .SBTTL CIREOP - CIRCUIT READ INFORMATION OPERATE
80          .SBTTL CIZEOP - CIRCUIT ZERO COUNTERS OPERATE
81
82          ;+
83          **CIREOP-CIRCUIT READ INFORMATION OPERATE ROUTINE
84          **CIZEOP-CIRCUIT ZERO COUNTERS OPERATE ROUTINE
85
86          ; THIS ROUTINE IS CALLED TO PERFORM THE READ CIRCUIT INFORMATION
87          ; FUNCTIONS. ZERO COUNTERS IS HANDLED AS A SPECIAL CASE OF THE
88          ; READ COUNTERS OPTION.
89
90          ; INPUTS:
91          R3 = ADDRESS OF INPUT/OUTPUT BUFFER
92          R4 = ADDRESS OF CONTEXT AREA (WITH DATA SET UP FROM LIREIN)
93
94          ; OUTPUTS:
95          R0 = NICE RETURN CODE
96          R2 = LENGTH OF DATA IN OUTPUT BUFFER
97          R3 = ADDRESS OF OUTPUT BUFFER
98          C-BIT = CLEAR IF SUCCESS, SET IF FAILURE
99
100         ; REGISTERS:
101         R3, R4, R5 ARE PRESERVED
102
103         CIREOP::
104         CIZEOP::
105         JSR     R5,$$SAVRG          ; SAVE R3-R5
106         MOV     R3,L$BUF(R4)        ; SAVE BUFFER POINTER
107         1$:     MOV     L$BUF(R4),R3  ; RESET BUFFER POINTER
108         MOV     #ME.DON,(R3)+        ; ASSUME WE'RE ALL DONE
109         TST     L$FLG(R4)            ; ANYTHING TO DO ?
110         BEQ     30$                 ; IF EQ, NO - RETURN
111         .IIF NE L$SEG-100000 .ERROR  ; VALUE ERROR
112         BMI     5$                   ; IF MI, CONTINUE WITH CURRENT CIRCUIT
113
114         ; FIND THE NEXT CIRCUIT TO OPERATE ON
115
116         CALL    GETCIR              ; FIND THE NEXT LINE
117         RCS     30$                 ; IF EQ, NO MORE LINES - FINISHED
118
119         ; FORMAT THE CIRCUIT-ID FOR RETURN
120
121         5$:     MOV     #MS.SUC,-1(R3) ; ASSUME SUCCESSFUL RETURN
122         CLRB    (R3)+                ; CLEAR ERROR DETAIL BYTES
123         CLRB    (R3)+                ; ...
124         CLRB    (R3)+                ; ...
125         CALL    FMTCIR              ; FORMAT THE CIRCUIT-ID
126
127         ; DISPATCH TO READ ROUTINES
128
129         10$:    MOV     #DISTBL,R5    ; POINT TO START OF TABLE
130         TST     (R5)                  ; AT END OF TABLE ?
131         BMI     20$                 ; IF MI, YES - DIDN'T FIND ROUTINE
132         CMPB    (R5),L$OPT(R4)        ; DISPATCH ON THIS OPERATION ?
133         BNE     15$                 ; IF NE, NO
134         MOV     2(R5),R5              ; GET THE DISPATCH ROUTINE ADDRESS
135         BEQ     20$                 ; IF NOT DEFINED, ILLEGAL OPERATION
  
```

CIREST - READ CIRCUIT STATUS      MACRO V05.03b Thursday 25-Jul-85 <sup>H 2</sup> 15:35  
Table of contents

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9-	334	GETADJ - Get an adjacency
10-	387	PUTNOD - Put node id and block size
11-	455	SETNAM - Set an image name field
12-	492	FNDPLD - Find physical link data base
13-	527	SNACIR - Determine substate if circuit owned by SNA

```

527 .SBTTL SNACIR - Determine substate if circuit owned by SNA
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581
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000000
000004
000002
000006
001470
001470
012702 074361
001500
001504 103430
001506 120264 000055
001512 001025
001514 017705 000000G
001520 001422
001522 016505 000006
001526 001417
001530 012500
001532 005300
001534 100414
001536
126164 000000 000054
001554 001366
001556 016166 000004 000000G
001564 000405
001566
001600
001602 103411
001604 032702 000002
001610 001006
001612 004567 000000G
001616 000001
001620 000201
001622 112723 000000
001626

```

```

P.CHAN= 0
P.STSC= 4
PU.SCP= 2
SPUNX= 6

```

```

: DEFINE PU DATABASE SYMBOLS
: LOCALLY TO AVOID NEED
: TO ASSEMBLE WITH SNA MACROS
: ...

```

```

SNACIR:
SWSTK$ 40$
MOV #*RSNA,R2
CALL @PDVID
BCS 20$
CMPB R2,L$PDV(R4)
BNE 20$
: ENTER SYSTEM STATE
: GET SNA'S PDV INDEX
: IF CS, SNA NOT IN SYSTEM : RJK05
: LINE OWNED BY SNA? : **~1
: NO
: POINT TO HOME BLOCK : RJK05
: WHOOPS, NOT LOADED : **~1
: POINT TO PU INDEX
: AGAIN, WHOOPS
: GET PU COUNT
10$: DEC R0
BMI 20$
CEACC$ (R5)+,R1
CMPB P.CHAN(R1),L$CHN(R4)
BNE 10$
MOV P.STSC(R1),R$R2(SP)
BR 30$
: ALL PUS SCANNED?
: YES, NOT ONLY OWNED BY SNA
: MAP NEXT DATABASE
: IS THIS THE PU FOR THE CHANNEL?
: NO, TRY NEXT ONE
: RETURN PU STATUS IN TASK R2
: RETURN
20$: RETC R0
30$: RETURN
: SET USER C-BIT
: RETURN TO USER MODE AT 40$
40$: BCS 50$
BIT #PU.SCP,R2
BNE 50$
JSR R5,SETPAR
WORD MP$SUB
WORD MT$COD!1
MOV #MS$STA,(R3)+
50$: RETURN
: IF CS, LINE NOT OWNED BY SNA
: IS PU IN SESSION WITH SSCP?
: YES, NO SUBSTATE NEEDED
: ELSE RETURN SUBSTATE
: ...
: ONE CODED BYTE
: SUBSTATE= STARTING
: RETURN

```

\*\*FILE\*\*ID\*\*CIRMAP

```

CCCCCCCC      IIIIII      RRRRRRRR      MM      MM      AAAAAA      PPPPPPPP
CCCCCCCC      IIIIII      RRRRRRRR      MM      MM      AAAAAA      PPPPPPPP
CC              II        RR      RR      MMMM      MMMM      AA      AA      PP      PP
CC              II        RR      RR      MMMM      MMMM      AA      AA      PP      PP
CC              II        RR      RR      MM      MM      MM      AA      AA      PP      PP
CC              II        RR      RR      MM      MM      MM      AA      AA      PP      PP
CC              II        RRRRRRRR      MM      MM      AA      AA      PPPPPPPP
CC              II        RRRRRRRR      MM      MM      AA      AA      PPPPPPPP
CC              II        R  RR      MM      MM      AAAAAAAAAA      PP
CC              II        RR      RR      MM      MM      AAAAAAAAAA      PP
CC              II        RR      RR      MM      MM      AA      AA      PP
CC              II        RR      RR      MM      MM      AA      AA      PP
CC              II        RR      RR      MM      MM      AA      AA      PP
CCCCCCCC      IIIIII      RR      RR      MM      MM      AA      AA      PP
CCCCCCCC      IIIIII      RR      RR      MM      MM      AA      AA      PP

```

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....
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....

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LL              SSSSSSSS      TTTTTTTTTT
LL              SSSSSSSS      TTTTTTTTTT
LL              SS              TT
LL              SS              TT
LL              SS              TT
LL              SS              TT
LL              SSSSSS        TT
LL              SSSSSS        TT
LL              SS            TT
LL              SS            TT
LL              SS            TT
LL              SS            TT
LLLLLLLLLLLL    SSSSSSSS      TT
LLLLLLLLLLLL    SSSSSSSS      TT

```

MP\$BUF	000170	MP\$GRP	000541	MP\$MVE	000145	MP\$RRT	002213	MP\$XMT	002166
MP\$BUP	006324	MP\$GTY	002224	MP\$SMV1	001634	MP\$RST	002212	MP\$XPF	000242
MP\$BUS	001643	MP\$HAD	001757	MP\$SMVR	001751	MP\$RSV	001754	MP\$XPL	000244
MP\$CAC	001750	MP\$HBT	002142	MP\$SMWN	002154	MP\$RSZ	001756	MP\$XPT	000240
MP\$CAS	001762	MP\$HDD	000162	MP\$SMXB	002172	MP\$RTI	001616	MP\$XXX	177777
MP\$CAT	002210	MP\$HTM	001612	MP\$SMXC	000466	MP\$RTM	001611	MP\$SSST	004406
MP\$CCS	004406	MP\$HWA	002210	MP\$SMXR	001630	MP\$RVE	001604	MP\$SACT	000001
MP\$CHN	002141	MP\$IAT	001322	MP\$SMXW	002143	MP\$RVT	000156	MP\$SADU	000010
MP\$CIR	000144	MP\$IDE	000144	MP\$SNAA	006335	MP\$SAC	000514	MP\$SALO	000007
MP\$CLK	002131	MP\$IDP	006327	MP\$SNAC	001130	MP\$SAD	000543	MP\$SASE	000006
MP\$CLN	002126	MP\$IHO	000215	MP\$SNAP	006326	MP\$SCA	000310	MP\$SATR	000011
MP\$CLT	002211	MP\$INA	002177	MP\$SNCT	000240	MP\$SCO	000144	MP\$SAUT	000000
MP\$CMB	002142	MP\$IND	002204	MP\$SNET	002114	MP\$SCT	002176	MP\$SCLE	000003
MP\$CMK	000537	MP\$INI	002201	MP\$SNLI	000765	MP\$SDU	000203	MP\$SDED	000004
MP\$CMX	002153	MP\$ITI	000776	MP\$SNNA	000764	MP\$SDV	000160	MP\$SDIE	000003
MP\$CND	000310	MP\$LAA	000231	MP\$SNOD	000500	MP\$SEH	004401	MP\$SDUM	000004
MP\$CNU	001753	MP\$LAN	000234	MP\$SNRA	006334	MP\$SER	000144	MP\$SFAI	000013
MP\$COB	000311	MP\$LAR	000202	MP\$SNRW	000214	MP\$SET	000000	MP\$SGLO	000000
MP\$CON	002126	MP\$LAS	000012	MP\$SNSA	001617	MP\$SGZ	001644	MP\$SHOL	000002
MP\$COS	001604	MP\$LBS	000203	MP\$SNTI	002141	MP\$SID	000176	MP\$SINA	000002
MP\$CPF	000230	MP\$LCO	000226	MP\$SNUM	001642	MP\$SIN	000310	MP\$SLOA	000003
MP\$CPL	000232	MP\$LCT	000156	MP\$SNVE	001274	MP\$SLI	000156	MP\$SLOO	000002
MP\$CPT	000226	MP\$LHL	000232	MP\$SNXN	001476	MP\$SLO	000171	MP\$SOFF	000001
MP\$CPU	000161	MP\$LLE	000227	MP\$SOAC	000632	MP\$SMX	002202	MP\$SON	000000
MP\$CSZ	001755	MP\$LLO	004432	MP\$SOAN	000620	MP\$SND	000500	MP\$SPRO	000006
MP\$CUS	002127	MP\$LMB	002152	MP\$SOCO	000776	MP\$SNP	006332	MP\$SREA	000004
MP\$CVA	000540	MP\$LMX	002200	MP\$SOHO	000214	MP\$SNU	000542	MP\$SREF	000001
MP\$DAL	002570	MP\$LNA	000144	MP\$SONA	000764	MP\$SOB	000524	MP\$SRES	000003
MP\$DCO	001464	MP\$LNO	000233	MP\$SONR	002114	MP\$SPA	000157	MP\$SRST	000002
MP\$DDT	002177	MP\$LOA	000170	MP\$SOQL	001453	MP\$SPR	000536	MP\$SRX	000002
MP\$DEL	001131	MP\$LOG	004514	MP\$SOTI	000777	MP\$SPS	000513	MP\$SRT	000005
MP\$DES	000156	MP\$LOO	000620	MP\$OTY	001022	MP\$STA	000000	MP\$SER	000002
MP\$DEV	002114	MP\$LTM	001613	MP\$OUS	000777	MP\$STI	002140	MP\$SHU	000002
MP\$DFA	001320	MP\$LTY	004533	MP\$OVE	001010	MP\$STT	002201	MP\$SRV	000007
MP\$DHO	001465	MP\$LWI	000230	MP\$OWN	004374	MP\$STY	000175	MP\$STA	000000
MP\$DIA	000173	MP\$MAC	004420	MP\$PAR	000036	MP\$SUB	000001	MP\$SYN	000012
MP\$DLB	002571	MP\$MAD	001630	MP\$PAS	000513	MP\$SUR	000156	MP\$TER	000001
MP\$DLG	004521	MP\$MAP	006327	MP\$PCH	002152	MP\$SVR	000512	MP\$TOP	000003
MP\$DLI	001466	MP\$MAR	001635	MP\$PCO	000024	MP\$SVS	000163	MP\$TRI	000005
MP\$DLT	002200	MP\$MAV	006321	MP\$PCT	000144	MP\$SWI	002260	MP\$UNR	000005
MP\$DRO	001441	MP\$MBN	001636	MP\$PDT	002114	MP\$SYP	002424	MP\$VMS	000004
MP\$DST	000454	MP\$MBR	001637	MP\$PHA	000170	MP\$TFL	000156	MP\$DON	177600
MP\$DTE	002140	MP\$MBU	001642	MP\$PHY	000012	MP\$TH1	002206	MP\$MOR	000002
MP\$DTY	001452	MP\$MCB	000156	MP\$PLI	000025	MP\$TH2	002205	MP\$PAR	000003
MP\$DUA	000207	MP\$MCO	001632	MP\$PLN	002140	MP\$TH3	002202	MP\$SUC	000001
MP\$DUC	000210	MP\$MDE	004421	MP\$PLO	000012	MP\$TLN	000202	MP\$AR4	000003
MP\$DUM	000202	MP\$MHO	001633	MP\$PMC	004374	MP\$TLO	000172	MP\$ASC	000100
MP\$DUP	002127	MP\$MLB	000202	MP\$PNT	002126	MP\$TPA	004375	MP\$BIL	000001
MP\$DVC	002114	MP\$MLK	001306	MP\$PRI	004411	MP\$TRI	002164	MP\$BYS	000011
MP\$DWE	001321	MP\$MLN	001631	MP\$PRO	002130	MP\$TST	000144	MP\$CI	000007
MP\$ELT	000157	MP\$MLP	006333	MP\$PSS	001763	MP\$TYP	002130	MP\$CLE	000077
MP\$ETY	001605	MP\$MRB	002171	MP\$PST	001762	MP\$UCS	004407	MP\$COD	000200
MP\$EVE	000311	MP\$MRO	001605	MP\$RET	001631	MP\$USR	001750	MP\$CON	000001
MP\$FNC	001752	MP\$MRP	006322	MP\$RFA	001323	MP\$VEC	004410	MP\$DMC	000004
MP\$GDT	002222	MP\$MRT	002153	MP\$RMX	002201	MP\$VER	004406	MP\$ETH	000006
MP\$GNM	002223	MP\$MRV	006320	MP\$RPA	004374	MP\$WDF	002165	MP\$HEX	000040
MP\$GRO	002115	MP\$MSB	000170	MP\$RPR	001606	MP\$WMX	002177	MP\$LPB	000005

CIZEIN - CIRCUIT ZERO COUNTERS MACRO V05.03b Saturday 29-Jun-85 12:20  
Table of contents

5- 53 MACRO CALLS AND LOCAL DATA  
6- 70 CIZEIN - CIRCUIT ZERO COUNTERS INITIALIZE

CIZEIN      CREATED BY MACRO ON 29-JUN-85 AT 12:20      PAGE 2      G 7

SYMBOL CROSS REFERENCE      CREF      04.00

SYMBOL	VALUE	REFERENCES
L\$NLT	= 000001	#5-67
L\$NUM	= 000100	#5-67      5-67
L\$OWN	= 000010	#5-67
L\$PLT	= 004000	#5-67
L\$PRO	= 010000	#5-67
L\$PVC	= 020053	#5-67
L\$RET	= 000200	#5-67      5-67      5-67
L\$SER	= 100000	#5-67
L\$STA	= 000002	#5-67
L\$SVC	= 000362	#5-67
L\$TAD	= 000020	#5-67
L\$TH1	= 000100	#5-67
L\$TH2	= 000200	#5-67
L\$TH3	= 000400	#5-67
L\$XMT	= 040000	#5-67
L\$ACT	000104	#5-67
L\$BBT	000114	#5-67
L\$BLK	000262	#5-67
L\$BSA	000122	#5-67
L\$BSD	000123	#5-67
L\$BSI	000124	#5-67
L\$BUF	000060	#5-67      *6-111      6-142
L\$CHN	000054	#5-67      6-123
L\$CMB	000234	#5-67
L\$COS	000101	#5-67
L\$CTB	000053	#5-67
L\$CTL	000002	#5-67
L\$CUS	000260	#5-67
L\$DDM	000000	#5-67
L\$DDT	000106	#5-67
L\$DEA	000105	#5-67
L\$DLT	000110	#5-67
L\$DTE	000240	#5-67
L\$DTEL	000236	#5-67
L\$DTEP	000250	#5-67
L\$FLG	000064	#5-67      *6-112      *6-149
L\$FLX	000076	#5-67
L\$FL1	000066	#5-67
L\$FL2	000070	#5-67
L\$HBT	000254	#5-67
L\$HTM	000226	#5-67
L\$INA	000125	#5-67
L\$IND	000126	#5-67
L\$INI	000127	#5-67
L\$LCT	000224	#5-67
L\$LEN	000264	#5-67      6-117
L\$LMB	000234	#5-67
L\$LTM	000230	#5-67
L\$MRT	000253	#5-67
L\$MSG	000056	#5-67
L\$MTYP	000075	#5-67
L\$MWN	000252	#5-67

```

Symbol table
$$$CHK= 000000
$$$CPS= 000000
$$$PRI= 000000
$$$TRP= 000000
BIT0 = 000001
BIT1 = 000002
BIT10 = 002000
BIT11 = 004000
BIT12 = 010000
BIT13 = 020000
BIT14 = 040000
BIT15 = 100000
BIT2 = 000004
BIT3 = 000010
BIT4 = 000020
BIT5 = 000040
BIT6 = 000100
BIT7 = 000200
BIT8 = 000400
BIT9 = 001000
BS10 = 000003
BS11 = 000004
BS12 = 000005
BS5 = 000000
BS6 = 000001
BS7 = 000002
BS7S10 = 000006
C$$CKP= 000000
C$$ORE= 000400
C$$RSH= 177564
DACIR 000040RG
DALIN 000030RG
DATB0 000000RG
DATB1 000006R
D$$BUG= 177514
D$$ISK= 000000
D$$L11= 000001
D$$YNC= 000000
D$$YNM= 000000
E$$XPR= 000000
FMTCOU= ***** GX
F$$LVL= 000001
G$$TPP= 000000
G$$TSS= 000000
G$$ITK= 000000
G$$WRD= 000000
I$$RAR= 000000
I$$RDN= 000000
KISAR6= ***** GX
K$$CNT= 177546
K$$CSR= 177546
K$$LDC= 000000
K$$TPS= 000074
LD$LP = 000000
LF$END= 000020
LF$MLT= 040000
LF$REA= 000001
LF$SEG= 100000
LF$SIG= 000040
LF$SKP= 000004
LF$VR2= 000010
LF$ZER= 000002
LF.ACT= 100000
LF.BRO= 000400
LF.BWT= 000007
LF.ENA= 002000
LF.LPB= 001000
LF.MDC= 000100
LF.MFL= 004000
LF.MTP= 000020
LF.PAC= 000200
LF.RDY= 040000
LF.R7= 010000
LF.SEK= 000040
LF.TIM= 000010
LF.UNL= 020000
LF.X2P= 000000
LN.CLO= 000000
LN.DUM= 000005
LN.LOA= 000004
LN.LOQ= 000003
LN.OAU= 000003
LN.OFF= 000001
LN.ON = 000000
LN.OPP= 000004
LN.OPE= 000001
LN.REF= 000002
LN.SER= 000002
LN.STA= 000017
LN.SUB= 000360
LN.TRI= 000006
LP$MPT= 000010
LP$MUX= 000004
LP$TRB= 000002
LP$UNT= 000001
LP$WCN= 000040
LP$WDV= 000020
LP$WLD= 000360
LP$WTR= 000200
LP$WUN= 000100
L$ADJ 000110
L$BUF 000060
L$CHN 000054
L$COU 000114
L$CTB 000053
L$CTL 000002
L$DDM 000000
L$FLG 000064
L$FLX 000070
L$LEN 000124
L$LTM 000070
L$MSG 000056
L$MTYP 000067
L$NAM 000000
L$NLEN= 000020
L$NOD 000112
L$NXT 000044
L$OPT 000062
L$PAR 000120
L$PDV 000055
L$PFG 000041
L$PLB 000116
L$PRD 000067
L$PVC 000004
L$SCN 000020
L$SCR 000072
L$SLEN 000066
L$SLT 000042
L$SNM 000046
L$SYL 000122
L$TNM 000052
L$TPT 000050
L$TRB 000040
L$TSZ 000070
L$TYP 000063
L$UNT 000003
L$$ASG= 000000
L$$DRV= 000000
L$$P11= 000001
L$$11R= 000000
L.COST 000015
L.CTL 000012
L.CVA 177776
L.DDM 000002
L.DDS 000004
L.DLC 000003
L.DLM 000006
L.DLS 000010
L.FLG 000000
L.KRBA 000016
L.LEN = 000022
L.MPF 000022
L.NMST 000020
L.NSTA 000014
L.OWNR 000021
L.UNT 000013
M$$CRB= 000124
M$$CRX= 000000
M$$FCS= 000000
M$$MGE= 000000
M$$NET= 000000
M$$OVR= 000000
N$$ACC= 000001
N$$BUF= 000001
N$$LDV= 000001
N$$MCP= 000001
N$$MLL= 000001
N$$MOV= 000010
N$$NCT= 000001
N$$PEM= 000001
P$$P45= 000000
P$$WRD= 000000
Q$$OPT= 000010
R$$DER= 000000
R$$K11= 000001
R$$SND= 000000
R$$11M= 000000
SF.ACT= 000200
SF.ENA= 000100
SF.LPB= 000004
SF.MFL= 000040
SF.PAC= 000020
SF.REA= 000010
SF.SER= 000001
SF.SVC= 000002
SF.UNL= 000040
S$$WRG= 000000
S$$YSZ= 007600
S.COST 000001
S.FLG 000000
S.LEN 000004
S.NMST 000002
S.OWNR 000003
T$$KMG= 000000
T$$MIN= 000000
T.DR 000002
T.ER 000024
T.FL 000004
T.LEN = 000070
T.LN 000022
T.OFFS= 000020 G
T.RA 000006
T.RC 000010
T.RCV 000036
T.RCVB 000042
T.SP 000020
T.TIME 000001
T.TMR 000000
T.TLZ 000046
T.VCT 177760
T.XC 000016
T.XMT 000026
T.XMTB 000032
T.XW 000012
V$$CTR= 001000
XPTCOU= ***** GX
X$$DBT= 000000
Y$$BM = 000000
Y$$REG = 000000
Y$$WID = 060000

```

. ABS. 177776 000 (RW,I,GBL,ABS,OVR)  
000146 001 (RW,I,LCL,REL,CON)  
Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 0  
Work file writes: 0  
Size of work file: 14828 Words ( 58 Pages)  
Size of core pool: 15496 Words ( 59 Pages)



DCPCOU - READ/AND OR ZERO DCP C MACRO V05.03b Saturday 29-Jun-85 12:21 Page 6-1

CONTEXT AREA DEFINITIONS

000002	B\$7:	.BLKB	1	; BASE TABLE + 7
000003	B\$10:	.BLKB	1	; BASE TABLE + 10
000004	B\$11:	.BLKB	1	; BASE TABLE + 11
000005	B\$12:	.BLKB	1	; BASE TABLE + 12
000006	B\$7S10:	.BLKB	1	; SUM OF BASE TABLE 7 AND 10
		.EVEN		
000000		.PSECT		

\*\*FILE\*\*ID\*\*DEALUN

```

DDDDDDDD      EEEEEEEEE      AAAAAA      LL      UU      UU      NN      NN
DDDDDDDD      EEEEEEEEE      AAAAAA      LL      UU      UU      NN      NN
DD      DD      EE      AA      AA      LL      UU      UU      NN      NN
DD      DD      EE      AA      AA      LL      UU      'U      NN      NN
DD      DD      EE      AA      AA      LL      UU      UU      NNNN      NN
DD      DD      EE      AA      AA      LL      UU      UU      NNNN      NN
DD      DD      EEEEEEEE      AA      AA      LL      UU      UU      NN      NN
DD      DD      EEEEEEEE      AA      AA      LL      UU      UU      NN      NN
DD      DD      EE      AAAAAAAAAA      LL      UU      UU      NN      NNNN
DD      DD      EE      AAAAAAAAAA      LL      UU      UU      NN      NNNN
DD      DD      EE      AA      AA      LL      UU      UU      NN      NN
DD      DD      EE      AA      AA      LL      UU      UU      NN      NN
DD      DD      EE      AA      AA      LL      UU      UU      NN      NN
DDDDDDDD      EEEEEEEEE      AA      AA      LLLLLLLLLL      UUUUUUUUUU      NN      NN
DDDDDDDD      EEEEEEEEE      AA      AA      LLLLLLLLLL      UUUUUUUUUU      NN      NN

```

....  
....  
....  
....

```

LL      SSSSSSSS      TTTTTTTTTT
LL      SSSSSSSS      TTTTTTTTTT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SSSSSS      TT
LL      SSSSSS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LLLLLLLLLL      SSSSSSSS      TT
LLLLLLLLLL      SSSSSSSS      TT

```

DLCCOU - READ AND ZERO DLC PRO MACRO V05.03b Saturday 29-Jun-85 12:22 Page 6-1  
Context area definitions

000002  
000003  
000004  
000005  
000006  
000000

B\$7: .BLKB 1  
B\$10: .BLKB 1  
B\$11: .BLKB 1  
B\$12: .BLKB 1  
B\$7\$10: .BLKB 1  
.EVEN  
.PSECT

; BASE TABLE + 7  
; BASE TABLE + 10  
; BASE TABLE + 11  
; BASE TABLE + 12  
; SUM OF BASE TABLE 7 AND 10

DLCCOU CREATED BY MACRO ON 29-JUN-85 AT 12:22 PAGE 1 G 12  
 SYMBOL CROSS REFERENCE CREF 04.00

SYMBOL	VALUE	REFERENCES
BIT0	= 000001	#7-62
BIT1	= 000002	#7-62
BIT10	= 002000	#7-62
BIT11	= 004000	#7-62
BIT12	= 010000	#7-62
BIT13	= 020000	#7-62
BIT14	= 040000	#7-62
BIT15	= 100000	#7-62
BIT2	= 000004	#7-62
BIT3	= 000010	#7-62
BIT4	= 000020	#7-62
BIT5	= 000040	#7-62
BIT6	= 000100	#7-62
BIT7	= 000200	#7-62
BIT8	= 000400	#7-62
BIT9	= 001000	#7-62
BS10	000003	#6-62
BS11	000004	#6-62
BS12	000005	#6-62
BS5	000000	#6-62
BS6	000001	#6-62
BS7	000002	#6-62
BS7S10	000006	#6-62
CE.ABO	= 100362	8-190
CE.ILN	= 100350	8-186
CE.UNS	= 100344	8-188
CM.CIR	= 000002	9-270
CM.LIN	= 000000	8-174 9-263
COPY	= 000664 R	8-114 8-128 #10-296
CURCTX	= ***** R	9-227
C.ADD	000034	*9-272 *9-273
C.BUF1	000014	10-299 10-300
C.CNT1	000020	8-110
C.CNT2	000030	*9-236
C.FLG	000022	8-111
C.FLG1	000022	8-136 8-176 *9-265 *9-270
C.FLG2	000032	8-138
C.FNC	000010	*9-259 9-261
C.LIN	000006	*9-230
C.NSP	000004	*9-227
C.RSV	000002	*9-261
C.STA	000007	*9-238
C.STS	000012	8-103
ENTITY	000000 R	*8-96 9-266
FC.MAN	= 000024	9-254 9-257
FMTCOU	= ***** GX	8-163 8-167
FORK	= ***** GX	8-100
FS.REA	= 001000	9-254
FS.ZER	= 002000	9-257
GETXPT	000732 R	8-179 #11-324
ISSAS	= *****	5-55
KISAR6	= ***** GX	8-120 *8-134 *8-169 10-297 *10-299 *10-305

DLMCOU - READ/AND OR ZERO DLM C MACRO V05.03b Saturday 29-Jun-85 12:22 Page 8  
DISPATCH TABLE ENTRY

67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80

```
.SBTTL DISPATCH TABLE ENTRY
:
: GENERATE AN ENTRY IN THE DISPATCH TABLES OF THE
: LINE AND CIRCUIT READ COUNTER MODULES.
:
:IF DF R$$$11S ! $$$BAS ! $$$RTR ! $$$PRO
.PSECT $$$DLC0
.WORD ^RDLM,DLMCOU ; READ CIRCUIT COUNTERS ENTRYPOINT
.PSECT
.ENDC
```

DLMCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:23      PAGE 5      G 14

MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME	REFERENCES
BIAS	#5-53    11-164    11-175
CALL	10-107    10-109    10-120    10-122    11-154
CALLR	#5-53
CEACC\$	#5-55
CIRCX\$	#5-55    6-65
CNTR\$\$	#5-57
DATA\$\$	#5-57
DBLOK\$	#5-57
DLBM\$	#9-86    #9-87
DLCOU\$	#5-53    9-86    9-87
DLMD\$	#5-54    5-58
MANDF\$	#5-57    5-57
MAP	#5-53    11-158
MBILD\$	#5-55    5-57
PDVDF\$	#5-54    5-60
RESMAP	#5-53    10-123
RESRG	#5-53    10-121
RETURN	10-125    11-185
SAVMAP	#5-53    10-108
SAVRG	#5-53    10-119
SLTDF\$	#5-54    5-59
SWSTK\$	10-107

<p>             \$\$\$CHK= 000000              \$\$\$CPS= 000000              \$\$\$PRI= 000000              \$\$\$TRP= 000000              \$\$\$CKP= 000000              \$\$\$ORE= 000400              \$\$\$RSH= 177564              DEALUN= ***** GX              DLXERR 000020R              DLXLUN 000200RG              DLXMSG 000004R              DLXQIO 000026RG              DLXTXT 000005R              \$\$\$BUG= 177514              \$\$\$ISK= 000000              \$\$\$L11= 000001              \$\$\$YNC= 000000              \$\$\$YNM= 000000              \$\$\$XPR= 000000              FMTLIN= ***** GX              \$\$\$VL= 000001              \$\$\$TTP= 000000              \$\$\$TSS= 000000              \$\$\$TIK= 000000              \$\$\$WRD= 000000              G.LUCW= 000004              G.LUFB= 000003              G.LUNA= 000000              G.LUNU= 000002              IE.UPN= ***** GX              IOSB 000000R              \$\$\$RAR= 000000              \$\$\$RDN= 000000              \$\$\$CNT= 177546              \$\$\$CSR= 177546              \$\$\$LDC= 000000              \$\$\$TPS= 000074              LC\$NTL= 000200              LC\$OWN= 000400              LD\$LP= 000000              LF\$MLT= 040000              LF\$REA= 000001              LF\$SEG= 100000              LF\$SKP= 000004           </p>	<p>             LF\$VR2= 000010              LF\$ZER= 000002              LP\$MPT= 000010              LP\$MIY= 000004              LP\$NYC= 100000              LP\$TRB= 000002              LP\$UNT= 000001              LP\$WCN= 000040              LP\$WDV= 000020              LP\$WLD= 000360              LP\$WTR= 000200              LP\$WUN= 000100              LS\$ACT= 000040              LS\$BBT= 010000              LS\$BLK= 001000              LS\$BSA= 000001              LS\$BSD= 000002              LS\$BSI= 000004              LS\$CHN= 000001              LS\$CMB= 000002              LS\$COS= 000004              LS\$CUS= 000004              LS\$DDT= 001000              LS\$DEA= 000100              LS\$DLM= 001004              LS\$DLT= 002000              LS\$DTE= 000010              LS\$HBT= 000400              LS\$HTM= 010000              LS\$JNA= 000010              LS\$IND= 000020              LS\$INI= 000040              LS\$LCT= 020000              LS\$LMB= 000002              LS\$LOO= 040000              LS\$MDT= 020000              LS\$MRT= 000020              LS\$MWN= 000040              LS\$MXR= 001000              LS\$MXR= 000020              LS\$MXW= 000040              LS\$NMT= 020000              LS\$NOR= 100000           </p>	<p>             LS\$NTI= 000200              LS\$NTL= 000001              LS\$NUM= 000100              LS\$OWN= 000010              LS\$PLT= 004000              LS\$PRO= 010000              LS\$PVC= 020053              LS\$RET= 000200              LS\$SER= 100000              LS\$STA= 000002              LS\$SVC= 000362              LS\$TAD= 000020              LS\$TH1= 000100              LS\$TH2= 000200              LS\$TH3= 000400              LS\$XMT= 040000              L\$ACT= 000104              L\$BBT= 000114              L\$BLK= 000262              L\$BSA= 000122              L\$BSD= 000123              L\$BSI= 000124              L\$BUF= 000060              L\$CHN= 000054              L\$CMB= 000234              L\$COS= 000101              L\$CTB= 000053              L\$CTL= 000002              L\$CUS= 000260              L\$DDM= 000000              L\$DDT= 000106              L\$DEA= 000105              L\$DLT= 000110              L\$DTE= 000240              L\$DTEL= 000236              L\$DTEP= 000250              L\$FLG= 000064              L\$FLX= 000076              L\$FL1= 000066              L\$FL2= 000070              L\$HB= 000254              L\$HTM= 000226              L\$JNA= 000125           </p>	<p>             L\$IND 000126              L\$INI 000127              L\$LCT 000224              L\$LEN 000264              L\$LMB 000234              L\$LTN 000230              L\$MRT 000253              L\$MSG 000056              L\$MTYP 000075              L\$MWN 000252              L\$MXB 000133              L\$MXR 000253              L\$MXW 000252              L\$NAM 000000              L\$NLEN= 000020              L\$NMT 000116              L\$NTI 000256              L\$NTL 000134              L\$NUM 000240              L\$NUML 000236              L\$NXT 000044              L\$OPT 000062              L\$OWN 000102              L\$PAR 000072              L\$PDV 000055              L\$PFG 000041              L\$PLT 000112              L\$PRO 000075              L\$PVC 000004              L\$RET 000256              L\$SCN 000020              L\$SCR 000166              L\$SER 000230              L\$SLEN 000074              L\$SLT 000042              L\$SNM 000046              L\$STA 000100              L\$TAD 000103              L\$TH1 000130              L\$TH2 000131              L\$TH3 000132              L\$TNM 000052              L\$TPT 000050           </p>	<p>             L\$TRB 000040              L\$TYP 000063              L\$UNT 000003              L\$XCH 000232              L\$XMT 000120              L\$BASG= 000000              L\$SDRV= 000000              L\$SP11= 000001              L\$SP11R= 000000              M\$SCRB= 000124              M\$SCRX= 000000              M\$SFCS= 000000              M\$SMGE= 000000              M\$SNET= 000000              M\$SOVR= 000000              N\$ACC= 000001              N\$SBUF= 000001              N\$LDV= 000001              N\$SMCP= 000001              N\$SMLL= 000001              N\$SMOV= 000010              N\$SNCI= 000001              N\$SPEN= 000001              P\$P45= 000000              P\$WRD= 000000              Q\$SDPT= 000010              R\$SDER= 000000              R\$SK11= 000001              R\$SND= 000000              R\$S11M= 000000              S\$WRG= 000000              S\$YSY= 007600              T\$SKMG= 000000              T\$SM1N= 000000              V\$SCTR= 001000              X\$SDBT= 000000              C\$BDSG= ***** GX              S\$SW = ***** GX              S\$AVAL= ***** GX              T\$MEFN= ***** GX              T\$MLUN= ***** GX              S\$ARG= 000002              S\$SOST= 000014           </p>
--	--	--	---	--

. ABS. 000264 000 (RW,I,GBL,ABS,OVR)  
 000266 001 (RW,I,LCL,REL,CON)  
 Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 0  
 Work file writes: 0  
 Size of work file: 13960 Words ( 55 Pages)  
 Size of core pool: 15496 Words ( 59 Pages)  
 Operating system: RSX-11M/PLUS

```

000002      LP$TRB = 2      ; TRIBUTARY NUMBER FOUND
000004      LP$MUX = 4      ; DEVICE IS MUX
000010      LP$MPT = 10     ; LINE IS MULTIPOINT
000020      LP$WDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      LP$WCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      LP$WUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      LP$WTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LP$WLD = LP$WDV!LP$WCN!LP$WUN!LP$WTR ; WILD CARD FIELD MASK

```

;; FLAGS WORD BIT DEFINITIONS (L\$FLG)

```

000001      L$NNTL=1      ; NTL SET FUNCTION
000002      L$NSTA=2      ; SET STATE
000004      L$NCOS=4      ; SET COST
000010      L$NOWN=10     ; SET OWNER
000020      L$NTAD=20     ; SET TRIBUTARY ADDRESS
000040      L$NACT=40     ; SET MULTIPOINT ACTIVE
000100      L$NDEA=100    ; SET MULTIPOINT DEAD
000200      L$NNTL=200    ; NTL CLEAR FUNCTION
000400      L$NOWN=400    ; CLEAR OWNER
001000      L$NDDT=1000   ; SET DEAD TIMER
002000      L$NDLT=2000   ; SET DELAY TIMER
004000      L$NPIT=4000   ; SET POLL TIMER
010000      L$NBBT=10000  ; SET BABBLE TIMER
020000      L$NNMT=20000  ; SET NORMAL TIMER
040000      L$NMTT=40000  ; SET TRANSMIT TIMER
100000      L$NSSER=100000 ; SET SERVICE [ENABLE/DISABLE]

```

;; FLAGS WORD BIT DEFINITIONS (L\$FL1)

```

000001      L$BBSA=1      ; SET ACTIVE BASE
000002      L$BBSD=2      ; SET DYING BASE
000004      L$BBSI=4      ; SET INACTIVE BASE
000010      L$BINA=10     ; SET ACTIVE INCREMENT
000020      L$BIND=20     ; SET DYING INCREMENT
000040      L$BINI=40     ; SET INACTIVE INCREMENT
000100      L$BTH1=100    ; SET DEAD THRESHOLD
000200      L$BTH2=200    ; SET DYING THRESHOLD
000400      L$BTH3=400    ; SET INACTIVE THRESHOLD
001000      L$BMBX=1000   ; SET MAXIMUM BLOCKS
010000      L$BHTM=10000  ; SET HELLO TIMER
020000      L$BMDT=20000  ; SET MODEM TEST
040000      L$BLDO=40000  ; SET CONTROLLER LOOPBACK
100000      L$BNOR=100000 ; SET CONTROLLER NORMAL

```

.IF DF R\$PRO ; PRO/DECNET

;; LOOPBACK TYPE WORD BIT DEFINITIONS (L\$LTYP)

```

L$INT = 0      ; INTERNAL LOOPBACK
L$EXT = 1      ; EXTERNAL LOOPBACK

```

;; MODEM TEST TYPE WORD BIT DEFINITIONS (L\$MT)

```

L$LCL = 0      ; LOCAL MODEM TEST
L$REM = 1      ; REMOTE MODEM TEST
L$OFF = 2      ; SHUT OFF MODEM TESTS
.ENDC ; DF R$PRO

```



136	000124	010346		MOV	R3, -(SP)	; PUSH BUFFER POINTER
137	000126			CALL	(R5)	; DISPATCH TO ROUTINE
138	000130	012602		MOV	(SP)+, R2	; RECOVER PREVIOUS BUFFER POINTER
139	000132	105774	000060	TSTB	@L\$BUF(R4)	; ERROR ?
140	000136	100411		BMI	12\$	; YES - PLENTY SIGNIFIGANT
141	000140	032764	000040 000064	BIT	#LF\$SIG, L\$FLG(R4)	; SHOWING SIGNIFIGANT CIRCUITS ?
142	000146	001405		BEQ	12\$	; IF EQ, NO
143	000150	020203		CMP	R2, R3	; ELSE, WAS THIS ONE NON-TRIVIAL ?
144	000152	001003		BNE	12\$	; IF NE, YES
145	000154	016403	000060	MOV	L\$BUF(R4), R3	; ELSE RE-INITIALIZE BUFFER POINTER
146	000160	000724		BR	1\$	; AND KEEP LOOKING
147						
148	000162	000406		12\$: BR	30\$	; AND FINISH MESSAGE
149						
150	000164	022525		15\$: CMP	(R5)+, (R5)+	; POINT TO NEXT FUNCTION
151	000166	000746		BR	10\$	; AND SEE IF IT MATCHES
152	000170	016403	000060	20\$: MOV	L\$BUF(R4), R3	; RESTORE BUFFER POINTER
153	000174	112723	177777	MOVB	#ME.FUN, (R3)+	; SET ILLEGAL FUNCTION ERROR
154						
155						
156						
157	000200	010302		30\$: MOV	R3, R2	; COPY CURRENT POINTER INTO BUFFER
158	000202	016403	000060	MOV	L\$BUF(R4), R3	; RESTORE INITIALIZE BUFFER POINTER
159	000206	160302		SUB	R3, R2	; CALC LENGTH OF MESSAGE
160	000210	111300		MOVB	(R3), R0	; SET THE RETURN CODE
161	000212	000241		CLC		; ASSUME SUCCESS
162	000214	100003		BPL	40\$	; IF PL, SUCCESS - RETURN
163	000216	005064	000064	CLR	L\$FLG(R4)	; ELSE, ZERO FLAGS
164	000222	000261		SEC		; SET ERROR RETURN
165	000224			40\$: RETURN		

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```
.TITLE  CIREST - READ CIRCUIT STATUS
.IDENT  /V05.00/
.ENABL  LC
.NLIST  CND
```

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```
.....
MODULE DESCRIPTION:
```

```
.....
NETWORK MANAGEMENT - READ LINE STATUS INFORMATION
```

```
.....
DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING
```

```
.....
IDENT HISTORY:
```

- ```
.....
1.00  01-JUL-81
      DECNET-11M/S V3.1
      DECNET-11M-PLUS V1.1

2.00  16-APR-82
      DECNET-11M V3.1
      DECNET-11M-PLUS V1.1

4.00  07-NOV-83
      DECNET-11M V4.0
      DECNET-11M-PLUS V2.0

5.00  22-JUL-85
      DECnet-11M/S V4.2
      DECnet-11M-Plus V3.0
      DECnet-Micro/Rsx V1.0
.....
```

CIREST - READ CIRCUIT STATUS. MACRO V05.03b Thursday 25-Jul-85 15:35 Page 13-1  
SNACIR - Determine substate if circuit owned by SNA

584

000001

.END

CIRMAP - CIRCUIT CHANGE MAPPING MACRO V05.03b Saturday 29-Jun-85 12:19<sup>4</sup>  
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|    |     |                                        |
|----|-----|----------------------------------------|
| 5- | 54  | MACRO CALLS AND LOCAL DATA             |
| 6- | 80  | SETTAD - SET TRIBUTARY STATION ADDRESS |
| 7- | 150 | SEACT - SET ACTIVE POLLING RATE        |
| 8- | 194 | SETDEA - SET DEAD POLLING RATE         |

|            |        |          |          |          |          |         |        |          |        |
|------------|--------|----------|----------|----------|----------|---------|--------|----------|--------|
| MT\$MAX    | 000037 | NM.OPR   | 003000   | RX.NXM=  | 000020   | S.LGTH= | 000050 | TF.FFE=  | 000004 |
| MT\$MUL    | 000100 | NM.VR2   | 002401   | RX.OVR=  | 000010   | S.LIN   | 000004 | TF.ROF=  | 000001 |
| MT\$NLE    | 000017 | NM.VR3   | 002402   | R\$SDER= | 000000   | S.LINK  | 177776 | TF.RTD=  | 000002 |
| MT\$NON    | 000001 | N\$SACC= | 000001   | R\$SK11= | 000001   | S.LMA   | 000026 | TF.TAE=  | 000010 |
| MT\$NR4    | 000005 | N\$SBUF= | 000001   | R\$SSND= | 000000   | S.LMOS  | 000030 | TF.TDF=  | 000004 |
| MT\$NTY    | 000060 | N\$SLDV= | 000001   | R\$S11M= | 000000   | S.LMRT  | 000027 | TF.TTO=  | 000010 |
| MT\$OCT    | 000060 | N\$SMCP= | 000001   | R.CSR    | 000056   | S.LMS   | 000025 | TF.URE=  | 000001 |
| MT\$PHA    | 000002 | N\$SMLL= | 000001   | R.FLG    | 000064   | S.LNK   | 000000 | TF.URA=  | 000002 |
| MT\$PO1    | 000000 | N\$SMOV= | 000010   | R.LST    | 000104   | S.LSA   | 000005 | TR.ALF   | 000102 |
| MT\$QP2    | 000010 | N\$SNCT= | 000001   | R.MAP    | 000110   | S.NCUB  | 000000 | TR.DEV   | 000100 |
| MT\$ROU    | 000000 | N\$SPEM= | 000001   | R.QUE    | 000062   | S.NCUL= | 000036 | TR.LEN=  | 000210 |
| MT\$R04    | 000004 | P\$SP45= | 000000   | R.SLN    | 000070   | S.NKLR  | 000040 | TR.MST   | 000074 |
| MT\$SEC    | 000000 | P\$SWRD= | 000000   | R.SRV    | 000060   | S.NKR   | 000037 | TR.PRE   | 000076 |
| MT\$SGD    | 000020 | P.ACTC   | 000012   | R.STA    | 000066   | S.NKRB  | 000052 | TR.TLZ   | 000072 |
| MT\$SYS    | 000002 | P.CFNC   | 000034   | R.STBL   | 000210   | S.NKRW  | 000045 | TX.NXM=  | 000002 |
| MT\$TER    | 000001 | P.CHAR   | 000042   | SETACT   | 000230RG | S.NKSW  | 000051 | TX.OVR=  | 000001 |
| MT\$TRI    | 000002 | P.CONT   | 000067   | SETDEA   | 000350RG | S.NKSW  | 000046 | TX.TMO=  | 000004 |
| MT\$TYP    | 007777 | P.DEDT   | 000100   | SETTAD   | 000000RG | S.NMST  | 000002 | T\$SKMG= | 000000 |
| MT\$USD    | 000000 | P.DELT   | 000076   | SE.IRS=  | 004000   | S.NTD   | 000024 | T\$SMIN= | 000000 |
| MT\$X25    | 000003 | P.DISL   | 000006   | SE.NRS=  | 002000   | S.OWNR  | 000003 | T.ACT    | 000031 |
| MUSINC     | 000001 | P.DISR   | 000004   | SE.RBS=  | 001000   | S.PLA   | 000010 | T.BTTC   | 000074 |
| MUSOUT     | 000002 | P.DVRF   | 000047   | SE.RBU=  | 000400   | S.PLC   | 000022 | T.BUF    | 000006 |
| MUSPER     | 000000 | P.DVTM   | 000046   | SE.RCH=  | 000001   | S.PLL   | 000006 | T.CHA    | 000032 |
| MV\$III    | 000000 | P.ECCB   | 000064   | SE.RDC=  | 000002   | S.PLS   | 000011 | T.CSR    | 000022 |
| MV\$IV     | 000001 | P.ENCB   | 000011   | SE.RRR=  | 000004   | S.PSA   | 000003 | T.DELT   | 000056 |
| MX\$ACT    | 000020 | P.HDER   | 000056   | SE.SBS=  | 000200   | S.RBE   | 000042 | T.DIN    | 000044 |
| MX\$CIR    | 000020 | P.INPQ   | 000036   | SE.SBU=  | 000100   | S.RCB   | 000020 | T.DOUT   | 000042 |
| MX\$CLN    | 000020 | P.LEN =  | 000154   | SE.SDC=  | 000020   | S.RCV   | 000014 | T.ERRC   | 000020 |
| MX\$CNM    | 000006 | P.LERR   | 000054   | SE.SHC=  | 000010   | S.RCVB  | 000072 | T.ITM    | 000001 |
| MX\$CON    | 000006 | P.LINE   | 000010   | SE.SRR=  | 000040   | S.RCVC  | 000056 | T.LBF    | 000046 |
| MX\$DAC    | 000020 | P.MODE   | 000060   | SF\$ANM  | 000001   | S.RDE   | 000034 | T.LNK    | 000000 |
| MX\$DTE    | 000020 | P.MODI   | 000061   | SF\$DNM  | 000002   | S.REPR  | 000050 | T.LTM    | 000054 |
| MX\$FIL    | 000034 | P.MTER   | 000057   | SF.ACT=  | 000200   | S.REPS  | 000047 | T.NDM    | 000066 |
| MX\$GLC    | 000777 | P.OFFS=  | 000046 G | SF.ENA=  | 000100   | S.RST   | 000036 | T.PIND   | 000007 |
| MX\$LIN    | 000020 | P.PARM   | 000070   | SF.LPB=  | 000004   | S.RTEC  | 000042 | T.QRAC   | 000060 |
| MX\$LON    | 000006 | P.PIND   | 000066   | SF.MFI=  | 000040   | S.RTY   | 000001 | T.QRIN   | 000062 |
| MX\$NMS    | 000454 | P.POLT   | 000103   | SF.PAC=  | 000020   | S.SELC  | 000066 | T.GRPD   | 000064 |
| MX\$NOD    | 000006 | P.RAQC   | 000020   | SF.REA=  | 000010   | S.SELT  | 000053 | T.QUE    | 000024 |
| MX\$OBJ    | 000006 | P.RASQ   | 000022   | SF.SER=  | 000001   | S.STA   | 000000 | T.QU2 =  | 000026 |
| MX\$OWN    | 000040 | P.RBFC   | 000021   | SF.SVC=  | 000002   | S.STE   | 000002 | T.RBF    | 000050 |
| MX\$PAR    | 000036 | P.RERR   | 000052   | SF.UNL=  | 000040   | S.STEC  | 000043 | T.RBTC   | 000020 |
| MX\$PAS    | 000010 | P.SEL    | 177776   | S\$SWRG= | 000000   | S.STLG  | 000104 | T.RDAT   | 000034 |
| MX\$RAC    | 000047 | P.SPFC   | 000104   | S\$SYSZ= | 007600   | S.STLN  | 000035 | T.RTM    | 000055 |
| MX\$RID    | 000047 | P.STAT   | 000002   | S.ALf    | 000044   | S.STPN  | 000034 | T.RTY    | 000030 |
| MX\$RPS    | 000047 | P.STMT   | 000074   | S.BLKC   | 000033   | S.TJMC  | 000054 | T.SEL    | 000040 |
| MX\$SID    | 000040 | P.TBAD   | 000062   | S.COST   | 000001   | S.TLZ   | 000012 | T.SELT   | 000052 |
| MX\$SNK    | 000377 | P.TJMC   | 000050   | S.CDUB   | 000044   | S.TMO   | 000040 | T.SFNC   | 000014 |
| MX\$TYP    | 000077 | P.TIME   | 000001   | S.COUL=  | 000040   | S.TNRP  | 000032 | T.SITC   | 000072 |
| MX\$UID    | 000020 | P.TIMR   | 000000   | S.CTL    | 000006   | S.TTEC  | 000041 | T.STAT   | 000002 |
| M\$S\$CRB= | 000124 | P.TRI18  | 000014   | S.DLCF   | 000102   | S.WFA   | 000016 | T.TJMC   | 000016 |
| M\$S\$CRX= | 000000 | P.VECT   | 177732   | S.ERR    | 000010   | S.XDE   | 000036 | T.TMR    | 000000 |
| M\$S\$FCS= | 000000 | P.VEC1   | 177752   | S.FLG    | 000000   | S.XID   | 000002 | T.TOP    | 000070 |
| M\$S\$MGE= | 000000 | P.XAQC   | 000026   | S.FNCP   | 000004   | S.XMB   | 000030 | T.TRLG=  | 000076 |
| M\$S\$NET= | 000000 | P.XAWQ   | 000030   | S.HTNA   | 000023   | S.XMP   | 000024 | T.TRLN   | 000005 |
| M\$S\$OVR= | 000000 | P.XBFC   | 000027   | S.LBE    | 000044   | S.XMT   | 000012 | T.TRPN   | 000004 |
| NM.CLN     | 003400 | Q\$SOP=  | 000010   | S.LEN    | 000004   | S.XMTB  | 000076 | T.XASQ   | 000010 |
| NM.INI     | 002400 | RBIAS =  | 000002   | S.LGR    | 000031   | S.XMTC  | 000062 | T.XBTC   | 000024 |

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.TITLE CIZEIN - CIRCUIT ZERO COUNTERS INITIALIZE  
.IDENT /V05.00/

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MODULE DESCRIPTION:

NETWORK MANAGEMENT - CIRCUIT ZERO COUNTERS INITIALIZE ROUTINE

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

IDENT HISTORY:

- 1.00 20-JUL-81  
DECNET-11M/S V3.1  
DECNET-11M-PLUS V1.1
- 2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1
- 4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0
- 5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/RX V1.0

CIZEIN      CREATED BY MACRO ON 29-JUN-85 AT 12:20      PAGE 3      H 7

SYMBOL CROSS REFERENCE      CREF      04.00

| SYMBOL   | VALUE      | REFERENCES                              |
|----------|------------|-----------------------------------------|
| L\$MXB   | 000133     | #5-67                                   |
| L\$MXR   | 000253     | #5-67                                   |
| L\$MXW   | 000252     | #5-67                                   |
| L\$NAM   | 000000     | #5-67                                   |
| L\$NLEN  | = 000020   | #5-67      5-67      5-67               |
| L\$NMT   | 000116     | #5-67                                   |
| L\$NTI   | 000256     | #5-67                                   |
| L\$NTL   | 000134     | #5-67                                   |
| L\$NUM   | 000240     | #5-67                                   |
| L\$NUML  | 000236     | #5-67                                   |
| L\$NXT   | 000044     | #5-67                                   |
| L\$OPT   | 000062     | #5-67      *6-110                       |
| L\$OWN   | 000102     | #5-67                                   |
| L\$PAR   | 000072     | #5-67      *6-135      6-146      6-147 |
| L\$PDV   | 000055     | #5-67                                   |
| L\$PFG   | 000041     | #5-67                                   |
| L\$PLT   | 000112     | #5-67                                   |
| L\$PRO   | 000075     | #5-67                                   |
| L\$PVC   | 000004     | #5-67                                   |
| L\$RET   | 000256     | #5-67                                   |
| L\$SCN   | 000020     | #5-67                                   |
| L\$SCR   | 000166     | #5-67                                   |
| L\$SER   | 000230     | #5-67                                   |
| L\$SLEN  | 000074     | #5-67                                   |
| L\$SLT   | 000042     | #5-67                                   |
| L\$SNM   | 000046     | #5-67                                   |
| L\$STA   | 000100     | #5-67                                   |
| L\$TAD   | 000103     | #5-67                                   |
| L\$TH1   | 000130     | #5-67                                   |
| L\$TH2   | 000131     | #5-67                                   |
| L\$TH3   | 000132     | #5-67                                   |
| L\$TNM   | 000052     | #5-67                                   |
| L\$TPT   | 000050     | #5-67                                   |
| L\$TRB   | 000040     | #5-67                                   |
| L\$TYP   | 000063     | #5-67                                   |
| L\$UNT   | 000003     | #5-67                                   |
| L\$XCH   | 000232     | #5-67                                   |
| L\$XMT   | 000120     | #5-67                                   |
| ME\$CIR  | 000003     | 6-135                                   |
| ME\$FOR  | 177776     | 6-129                                   |
| ME\$FUN  | 177777     | 6-107                                   |
| ME\$MPR  | 177773     | 6-116                                   |
| MO\$COU  | 000060     | 6-109                                   |
| MO\$REA  | 000200     | 6-105                                   |
| MO\$ZER  | 000000     | 6-102                                   |
| MS\$MOR  | 000002     | 6-138                                   |
| R\$\$PRO | = *****    | 5-67                                    |
| \$SAVRG  | = ***** GX | 6-100                                   |

DACOU - READ/AND OR ZERO DA COU MACRO V05.03b Saturday 29-Jun-85 12:20 <sup>H 8</sup> Page 10-2  
Symbol table

Operating system: RSX-11M/PLUS

Elapsed time: 00:00:16.43

SY:DACOU.V2,[135,134]DACOU/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DACOU



```

BIT DEFINITIONS

        .SBTTL  BIT DEFINITIONS
        :
        : PARSE FLAG DEFINITIONS (L$PFG)
        :
000001      LP$UNT = 1          ; UNIT NUMBER FOUND
000002      LP$TRB = 2        ; TRIBUTARY NUMBER FOUND
000004      LP$MUX = 4        ; DEVICE IS MUX
000010      LP$MPT = 10       ; LINE IS MULTIPOINT
000020      LP$WDV = 20       ; WILD CARD DEVICE NAME FOUND
000040      LP$WCN = 40       ; WILD CARD CONTROLLER NUMBER FOUND
000100      LP$WUN = 100      ; WILD CARD UNIT NUMBER FOUND
000200      LP$WTR = 200      ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LP$WLD = LP$WDV!LP$WCN!LP$WUN!LP$WTR ; WILD CARD FIELD MASK

        :
        : FLAGS WORD BIT DEFINITIONS (L$FLG)
        :
000001      LF$REA = 1        ; READ COUNTERS OPERATION
000002      LF$ZER = 2        ; ZERO COUNTERS OPERATION
000004      LF$SKP = 4        ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                                ; THIS IS USED TO FORCE AN EXTRA PASS
                                ; FOR A MULTIPOINT LINE TO RETURN THE
                                ; CONTROLLER COUNTERS AS WELL AS ALL
                                ; OF THE TRIBUTARY COUNTERS.
000010      LF$VR2 = 10       ; CONNECTED TO VERSION 2.0 NCP
000020      LF$END = 20       ; EXECUTOR IS AN ENDNODE
000040      LF$SIG = 40       ; SHOWING SIGNIFIGANT LINES/CIRCUITS
040000      LF$MLT = 40000    ; MULTIPLE ADJACENCY FLAG
100000      LF$SEG = 100000   ; SEGMENTED RESPONSE IN PROGRESS

        :
        : BIT POSITION DEFINITIONS
        :
000001      BIT0 = 1
000002      BIT1 = 2
000004      BIT2 = 4
000010      BIT3 = 10
000020      BIT4 = 20
000040      BIT5 = 40
000100      BIT6 = 100
000200      BIT7 = 200
000400      BIT8 = 400
001000      BIT9 = 1000
002000      BIT10 = 2000
004000      BIT11 = 4000
010000      BIT12 = 10000
020000      BIT13 = 20000
040000      BIT14 = 40000
100000      BIT15 = 100000

```

DEALUN - DEASSIGN TEMPORARY LUN MACRO V05.03b Saturday 29-Jun-85 <sup>H 10</sup> 17:42  
Table of contents

5- 56 MACRO LIBRARY CALLS  
6- 66 DEALUN - DEASSIGN TEMPORARY LUN

```

BIT DEFINITIONS

        .SBTTL BIT DEFINITIONS
        ;
        ; PARSE FLAG DEFINITIONS (L$PFG)
        ;
000001      LPSUNT = 1      ; UNIT NUMBER FOUND
000002      LPSTRB = 2      ; TRIBUTARY NUMBER FOUND
000004      LPSMUX = 4      ; DEVICE IS MUX
000010      LPSMPT = 10     ; LINE IS MULTIPOINT
000020      LPSWDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      LPSWCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      LPSWUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      LPSWTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LPSWLD = LPSWDV!LPSWCN!LPSWUN!LPSWTR ; WILD CARD FIELD MASK

        ;
        ; FLAGS WORD BIT DEFINITIONS (L$FLG)
        ;
000001      LFSREA = 1      ; READ COUNTERS OPERATION
000002      LFSZER = 2      ; ZERO COUNTERS OPERATION
000004      LFSKIP = 4      ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                                ; THIS IS USED TO FORCE AN EXTRA PASS
                                ; FOR A MULTIPOINT LINE TO RETURN THE
                                ; CONTROLLER COUNTERS AS WELL AS ALL
                                ; OF THE TRIBUTARY COUNTERS.
000010      LFSVR2 = 10     ; CONNECTED TO VERSION 2.0 NCP
000020      LFSEND = 20     ; EXECUTOR IS AN ENDNODE
000040      LFS$SIG = 40     ; SHOWING SIGNIFIGANT LINES/CIRCUITS
040000      LFS$MLT = 40000  ; MULTIPLE ADJACENCY FLAG
100000      LFS$SEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS

        ;
        ; BIT POSITION DEFINITIONS
        ;
000001      BIT0 = 1
000002      BIT1 = 2
000004      BIT2 = 4
000010      BIT3 = 10
000020      BIT4 = 20
000040      BIT5 = 40
000100      BIT6 = 100
000200      BIT7 = 200
000400      BIT8 = 400
001000      BIT9 = 1000
002000      BIT10 = 2000
004000      BIT11 = 4000
010000      BIT12 = 10000
020000      BIT13 = 20000
040000      BIT14 = 40000
100000      BIT15 = 100000

        ;
        ; Local data
        ;
63
64
65
66
67 000000      ENTITY: .BLKW 1      ; entity type

```

DLCCOU CREATED BY MACRO ON 29-JUN-85 AT 12:22 PAGE 2 H 12  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES               |
|---------|----------|--------------------------|
| LDBGI   | = *****  | GX 9-224                 |
| LDBRT   | = *****  | GX 8-198                 |
| LF\$END | = 000020 | #7-62                    |
| LF\$MLT | = 040000 | #7-62                    |
| LF\$REA | = 000001 | #7-62 9-252              |
| LF\$SEG | = 100000 | #7-62                    |
| LF\$SIG | = 000040 | #7-62                    |
| LF\$SKP | = 000004 | #7-62                    |
| LF\$VR2 | = 000010 | #7-62 8-171 9-268        |
| LF\$ZER | = 000002 | #7-62 8-105 9-255 11-327 |
| LF.ACT  | = 100000 | #5-57                    |
| LF.BRO  | = 000400 | #5-57                    |
| LF.BWT  | = 000007 | #5-57                    |
| LF.ENA  | = 002000 | #5-57                    |
| LF.LPB  | = 001000 | #5-57                    |
| LF.MDC  | = 000100 | #5-57                    |
| LF.MFL  | = 004000 | #5-57                    |
| LF.MTP  | = 000020 | #5-57                    |
| LF.PAC  | = 000200 | #5-57                    |
| LF.RDY  | = 040000 | #5-57                    |
| LF.REA  | = 010000 | #5-57                    |
| LF.SER  | = 000040 | #5-57                    |
| LF.TIM  | = 000010 | #5-57                    |
| LF.UNL  | = 020000 | #5-57                    |
| LF.X2P  | = 000000 | #5-57                    |
| LN.CLO  | = 000000 | #5-57                    |
| LN.DUM  | = 000005 | #5-57                    |
| LN.LOA  | = 000004 | #5-57                    |
| LN.LOO  | = 000003 | #5-57                    |
| LN.OAU  | = 000003 | #5-57                    |
| LN.OFF  | = 000001 | #5-57                    |
| LN.ON   | = 000000 | #5-57                    |
| LN.OOP  | = 000004 | #5-57                    |
| LN.OPE  | = 000001 | #5-57                    |
| LN.REF  | = 000002 | #5-57                    |
| LN.SER  | = 000002 | #5-57                    |
| LN.STA  | = 000017 | #5-57                    |
| LN.SUB  | = 000360 | #5-57                    |
| LN.TRI  | = 000006 | #5-57                    |
| LP\$MPT | = 000010 | #7-62 8-156              |
| LP\$MUX | = 000004 | #7-62                    |
| LP\$TRB | = 000002 | #7-62 8-159              |
| LP\$UNT | = 000001 | #7-62                    |
| LP\$WCN | = 000040 | #7-62 7-62               |
| LP\$WDV | = 000020 | #7-62 7-62               |
| LP\$WLD | = 000360 | #7-62                    |
| LP\$WTR | = 000200 | #7-62 7-62               |
| LP\$WUN | = 000100 | #7-62                    |
| L\$ADJ  | 000110   | #6-62                    |
| L\$BUF  | 000060   | #6-62 8-121 11-333       |
| L\$CHN  | 000054   | #6-62 9-229              |
| L\$COU  | 000114   | #6-62                    |

DLMCOU - READ/AND OR ZERO DLM C MACRO V05.03b Saturday 29-Jun-85 12:22 Page 9  
DLMTB0 - DLM COUNTER TABLES

82  
83  
84  
85  
86  
87

000000  
000004

.SBTTL DLMTB0 - DLM COUNTER TABLES  
; DLM TABLE 0 - NETWORK MANAGEMENT LAYER (DLM LINE TABLE)  
DLMTB0: DLCOUS 0,16.,Q\$TIMZ,R1 ; SECONDS SINCE LAST ZEROED (STATION)  
DLCOUS END ;



DLXQ10 - ISSUE 1/0 TO DLX      MACRO V05.03b Saturday 29-Jun-85 <sup>H 15</sup> 12:23    Page 9-2  
Symbol table

Elapsed time: 00:00:16.05  
SY:DLXQ10.V2,[135,134]DLXQ10/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DLXQ10

```

; Flags word bit definitions for X.25 circuits and lines (L$FLX)
;
; Circuits:
000001      L$CHN =      1      ; Set PVC channel
000002      L$CMB =      2      ; Set maximum data
000004      L$CUS =      4      ; Set circuit usage
000010      L$DTE =     10      ; Set DTE
000020      L$MXR =     20      ; Set maximum recalls
000040      L$MXW =     40      ; Set maximum window
000100      L$NUM =    100      ; Set DLM number
000200      L$RET =    200      ; Set recall timer
001000      L$BLK =   1000      ; Set blocking
100000      L$NXC = 100000      ; Circuit is a new X.25 circuit
;
; Lines:
000400      L$HBT =     400      ; Set holdback timer
000002      L$LMB = L$CMB        ; Set max block
000020      L$MRT = L$MXR        ; Set max retransmits
000040      L$MWN = L$MXW        ; Set max window
000200      L$NTI = L$RET        ; Set retransmit timer
010000      L$PRO = 10000        ; Set line protocol
;
; Common:
020000      L$LCT = 20000        ; Set counter timer
;
; Groupings:
020053      L$PVC = L$CHN!L$CMB!L$DTE!L$MXW!L$LCT
000362      L$SVC = L$CMB!L$MXR!L$MXW!L$NUM!L$RET
001004      L$DLM = L$BLK!L$CUS
  
```



```

167          .SBTTL GETCIR - GET THE NEXT CIRCUIT-ID
168
169      ;+
170      ;*-GETCIR-GET THE NEXT CIRCUIT-ID
171      ;THIS ROUTINE FINDS THE NEXT CIRCUIT THAT MATCHES THE CRITERIA
172      ;PROVIDED.
173
174      ;INPUTS:
175      ;R4 = ADDRESS OF CONTEXT BLOCK WITH:
176      ;CONTEXT FROM PRSCIR AND PREVIOUS NXTCIR.
177      ;LSTYP(R4) = USER SPECIFIED TYPE (NAMED, ACTIVE OR KNOWN CIRCUITS)
178
179      ;OUTPUTS:
180      ;IF CC, CIRCUIT FOUND AND CONTEXT AREA UPDATED, ELSE
181      ;NO MATCHING CIRCUIT FOUND.
182
183      ;REGISTERS:
184      ;R3, R4 AND R5 ARE PRESERVED
185      ;-
186
187      000226      GETCIR:
188      000226      10$: CALL    NXTCIR      ; FIND THE NEXT CIRCUIT
189      000232      103453      BCS     50$      ; IF CS, THERE WAS NONE
190      000234      142764      BICB    #LP$TRB,L$PFG(R4) ; ASSUME NO TRIB SPECIFIED
191      000242      132764      BITB    #LP$MPT,L$PFG(R4) ; ELSE, MULTIPOINT LINE ?
192      000250      001403      BEQ     30$      ; BR IF NO
193      000252      152764      BISB    #LP$TRB,L$PFG(R4) ; ELSE INDICATE TRIB SPECIFIED
194      000260      126427      CMPB    LSTYP(R4),#MF$ACT ; SHOULD WE SHOW ACTIVE ONLY ?
195      000266      001034      BNE     40$      ; IF NE, NO - USE IT
196
197      000270      022764      .IF NDF R$$11$
198      000276      001430      CMP     #-1,L$TPT(R4) ; IS THIS A PSI CIRCUIT?
199
200      .ENDC      MOV     L$SLT(R4),R1 ; ELSE, GET THE SLT ADDRESS
201      000304      032761      BIT     #LF.BRO,L.FLG(R1) ; IS THIS AN ETHERNET CONTROLLER ?
202      000312      001014      BNE     35$      ; IF NE, LOOKS LIKE MULTIPOINT
203      000314      032761      BIT     #LF.ACT,L.FLG(R1) ; IS THE LINE ACTIVE ?
204      000322      001741      BEQ     10$      ; IF EQ, NO - TRY NEXT ONE
205      000324      032761      BIT     #LF.MTP,L.FLG(R1) ; ELSE, IS THIS A MULTIPOINT LINE ?
206      000332      001412      BEQ     40$      ; IF EQ, NO - LINE IS ACTIVE
207      000334      132764      BITB    #LP$TRB,L$PFG(R4) ; IS THIS A TRIBUTARY OPERATION ?
208      000342      001406      BEQ     40$      ; BR IF NO-AT LEAST 1 STATION IS ACTIVE
209      000344      016402      35$: MOV     L$TPT(R4),R2 ; ELSE, GET TRIB FLAGS POINTER
210      000350      132762      BITB    #SF.ACT,S.FLG(R2) ; IS THIS STATION ACTIVE ?
211      000356      001723      BEQ     10$      ; IF EQ, NO - TRY NEXT LINE/TRIB
212      000360      000241      40$: CLC
213      000362      50$: RETURN
214
215      000001      .END
  
```

```

56      .SBTTL Macro calls and local data
57
58      ;
59      ; MACRO LIBRARY CALLS
60      ;
61      .MCALL MANDF$,SAVRG,RESRG,PDVDF$,SLTDF$,PHBDF$
62      .MCALL ECDDB$,SAVMAP,MAP,RESMAP,RETC,CEACC$,BIAS,MESAG$
63      .MCALL XPDDB$,PLBDF$,ASL$,ADJDF$,CIRCX$,DHBDF$
64      MANDF$      ; DEFINE NETWORK MANAGEMENT SYMBOLS
65      PDVDF$      ; DEFINE PDV OFFSETS
66      PHBDF$      ; DEFINE PSI HOME BLOCK OFFSETS
67      SLTDF$      ; DEFINE SLT OFFSETS
68      ECDDB$      ; DEFINE ECL'S DDB SYMBOLS
69      XPDDB$      ; DEFINE XPT'S DDB SYMBOLS
70      PLBDF$      ; DEFINE PLB OFFSETS
71      ADJDF$      ; DEFINE ADJACENCY OFFSETS
72      DHBDF$      ; DEFINE DEC HOME BLOCK
73      CIRCX$      ; DEFINE CONTEXT AREA
74
75      000040      SPACE = 40      ; ASCII SPACE
76
77      .EVEN

```

|                   |                 |                   |                 |                  |
|-------------------|-----------------|-------------------|-----------------|------------------|
| Symbol table      |                 |                   |                 |                  |
| AT\$ACL= 000100   | D\$DELW 000046  | H\$HITS 000034    | LN.OFF= 000001  | L\$\$11R= 000000 |
| AT\$ADN= 000040   | D\$END = 000104 | H\$HLEN 000044    | LN.ON = 000000  | L.COST 000015    |
| AT\$AUP= 000020   | D\$FNB 000034   | H\$LBDA 000070    | LN.DOP= 000004  | L.CTL 000012     |
| AT\$CYC= 000004   | D\$HIOR 000024  | H\$LBDN 000072    | LN.OPE= 000001  | L.CVA 177776     |
| AT\$LV1= 000002   | D\$HOST 000022  | H\$LDTE 000002    | LN.REF= 000002  | L.DDM 000002     |
| AT\$LV2= 000001   | D\$INAC 000044  | H\$LEN 000042     | LN.SER= 000002  | L.DDS 000004     |
| AT\$NEX= 000200   | D\$INCT 000042  | H\$LOTS 000032    | LN.STA= 000017  | L.DLC 000003     |
| AT\$UP = 000010   | D\$IPL 000051   | H\$NETW 000024    | LN.SUB= 000360  | L.DLM 000006     |
| A\$CIR 000003     | D\$LID 000020   | H\$NML = 000006   | LN.TRI= 000006  | L.DLS 000010     |
| A\$LEN 000004     | D\$LNAM 000006  | H\$NPT 000022     | LP\$MPT= 000010 | L.FLG 000000     |
| A\$NID 000000     | D\$LNAM 000006  | H\$PTB 000020     | LP\$MUX= 000004 | L.KRBA 000016    |
| A\$TM 000003      | D\$LST 000047   | H\$PVC 000006     | LP\$TRB= 000002 | L.LEN = 000022   |
| A\$TM1 000002     | D\$MAXC 000064  | H\$RDE 000004     | LP\$UNT= 000001 | L.MPF 000022     |
| A\$TSZ 000000     | D\$MAXH 000066  | H\$RNV 000042     | LP\$WCN= 000040 | L.NMST 000020    |
| A\$TYP 000002     | D\$MAXV 000070  | H\$SVC 000036     | LP\$WDV= 000020 | L.NSTA 000014    |
| A\$CHK= 000000    | D\$MLL 000040   | H\$STRB 000016    | LP\$WLD= 000360 | L.OWNR 000021    |
| A\$CPS= 000000    | D\$MNO 000041   | H\$XAVL 000100    | LP\$WTR= 000200 | L.UNT 000013     |
| A\$PRI= 000000    | D\$NA 000062    | H\$XBIA 000074    | LP\$WUN= 000100 | MAPADD= ***** GX |
| A\$TRP= 000000    | D\$NBEA 000056  | H\$X29C 000040    | LS\$ADJ 000110  | MAPCHN= ***** GX |
| BIT0 = 000001     | D\$NBRA 000054  | I\$RAR= 000000    | LS\$BUF 000060  | MB\$DIS 000001   |
| BIT1 = 000002     | D\$NEND= 000054 | I\$RDN= 000000    | LS\$CHN 000054  | MB\$ENA 000000   |
| BIT10 = 002000    | D\$NLN 000030   | K\$SAR6= ***** GX | LS\$CDU 000114  | MB\$FUL 000002   |
| BIT11 = 004000    | D\$NN 000060    | K\$CNT= 177546    | LS\$CTB 000053  | MB\$MIX 000002   |
| BIT12 = 010000    | D\$OUTT 000043  | K\$CSR= 177546    | LS\$CTL 000002  | MB\$ONE 000001   |
| BIT13 = 020000    | D\$RETF 000050  | K\$SLDC= 000000   | LS\$DDM 000000  | MB\$RXO 000001   |
| BIT14 = 040000    | D\$RNN 000002   | K\$STPS= 000074   | LS\$FLG 000064  | MB\$TXD 000000   |
| BIT15 = 100000    | D\$RTMR 000076  | LC\$EXT 000000    | LS\$FLX 000070  | MB\$ZER 000000   |
| BIT2 = 000004     | D\$SEG 000036   | LC\$INT 000001    | LS\$LEN 000124  | MC\$BAB 006073   |
| BIT3 = 000010     | D\$SER 000032   | LD\$LP = 000000   | LS\$LTM 000070  | MC\$BID 001765   |
| BIT4 = 000020     | D\$SRL 000052   | LF\$END= 000020   | LS\$MSG 000056  | MC\$BMC 001767   |
| BIT5 = 000040     | D\$BUG= 177514  | LF\$MLT= 040000   | LS\$MTYP 000067 | MC\$BSC 001766   |
| BIT6 = 000100     | D\$ISK= 000000  | LF\$REA= 000001   | LS\$NAM 000000  | MC\$CAC 001442   |
| BIT7 = 000200     | D\$LL1= 000001  | LF\$SEG= 100000   | LS\$NEN= 000020 | MC\$CAP 001440   |
| BIT8 = 000400     | D\$SYNC= 000000 | LF\$SIG= 000040   | LS\$NOD 000112  | MC\$CCL 001445   |
| BIT9 = 001000     | D\$SYNM= 000000 | LF\$SKP= 000004   | LS\$NXT 000044  | MC\$CDC 002045   |
| BS10 000003       | E\$XPR= 000000  | LF\$VR2= 000010   | LS\$OPT 000062  | MC\$CDF 001441   |
| BS11 000004       | FNDPLD 001366R  | LF\$ZER= 000002   | LS\$PAR 000120  | MC\$CIF 001465   |
| BS12 000005       | F\$LV1= 000001  | LF\$ACT= 100000   | LS\$PDV 000055  | MC\$CLD 001464   |
| BS5 000000        | GETADE 000636R  | LF\$BRO= 000400   | LS\$PFG 000041  | MC\$COU 100000   |
| BS6 000001        | GETADJ 000764R  | LF\$BWT= 000007   | LS\$PLB 000116  | MC\$CTL 001454   |
| BS7 000002        | G\$TTP= 000000  | LF\$ENA= 002000   | LS\$PRO 000067  | MC\$CTR 001452   |
| BS7S10 000006     | G\$TSS= 000000  | LF\$LPB= 001000   | LS\$PVC 000004  | MC\$CTS 001453   |
| CF\$VR2= ***** GX | G\$TTK= 000000  | LF\$MDC= 000100   | LS\$SCN 000020  | MC\$DOV 002050   |
| CF\$VR3= ***** GX | G\$WRD= 000000  | LF\$MFL= 004000   | LS\$SCR 000072  | MC\$LBR 001750   |
| CIREST 000052RG   | HF\$DLM= 000002 | LF\$MTP= 000020   | LS\$LEN 000066  | MC\$LSB 001751   |
| CURCTX= ***** GX  | HF\$GWY= 000010 | LF\$PAC= 000200   | LS\$SLT 000042  | MC\$LDI 001774   |
| C\$FLAG= ***** GX | HF\$HOS= 000004 | LF\$RDY= 040000   | LS\$SNM 000046  | MC\$LDO 001775   |
| C\$CKP= 000000    | HF\$XDF= 000020 | LF\$REA= 010000   | LS\$SYL 000122  | MC\$LDR 001762   |
| C\$SORE= 000400   | H\$CUG 000010   | LF\$SER= 000040   | LS\$TNM 000052  | MC\$LDS 001763   |
| C\$SRSH= 177564   | H\$DST 000012   | LF\$TIM= 000010   | LS\$TPT 000050  | MC\$LLB 002021   |
| DECP1 = ***** GX  | H\$D29 000014   | LF\$UNL= 020000   | LS\$TRB 000040  | MC\$LLP 002115   |
| D\$AMXC 000072    | H\$FLG 000000   | LF\$X2P= 000000   | LS\$TSZ 000070  | MC\$LLR 002007   |
| D\$AMXH 000074    | H\$GLEN 000104  | LN.CLO= 000000    | LS\$TYP 000063  | MC\$LOO 000001   |
| D\$ANN 000000     | H\$GLT 000044   | LN.DUM= 000005    | LS\$UNT 000003  | MC\$LRB 002020   |
| D\$BRPR 000102    | H\$GNAM 000050  | LN.LOA= 000004    | LS\$ASG= 000000 | MC\$LRP 002114   |
| D\$BRTM 000100    | H\$GNML= 000020 | LN.LOD= 000003    | LS\$DRV= 000000 | MC\$LRR 002006   |
| D\$DELF 000045    | H\$GPT 000046   | LN.OAU= 000003    | LS\$P11= 000001 | MC\$LSI 002032   |

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.TITLE CIRMAP - CIRCUIT CHANGE MAPPING ROUTINES  
.IDENT /V05.00/  
.ENABL LC

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MODULE DESCRIPTION:

NETWORK MANAGEMENT - CIRCUIT CHANGE PARAMETERS OPERATE ROUTINE

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

IDENT HISTORY:

- 1.00 08-JUL-81  
DECNET-11M/S V3.1  
DECNET-11M-PLUS V1.1
- 2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1
- 4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0
- 5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/RSX V1.0

CIRMAP - CIRCUIT CHANGE MAPPING MACRO V05.03b Saturday 29-Jun-85 12:19 Page 8-5

Symbol table

|                  |                |                |               |                   |
|------------------|----------------|----------------|---------------|-------------------|
| T.XDAT= 000030   | ZF.INI= 040000 | ZF.PSE= 002000 | Z.DSP= 000000 | Z.SCH= 000007     |
| V\$\$CTR= 001000 | ZF.KMX= 000020 | ZF.SLI= 010000 | Z.FLG= 000010 | \$HEADR= ***** GX |
| X\$\$DBT= 000000 | ZF.LLC= 000004 | ZF.TIM= 000200 | Z.LEN= 000016 | \$SLCNT= 000072 G |
| ZF.COU= 001000   | ZF.LMC= 000100 | ZF.X3P= 000000 | Z.LLN= 000006 | \$LLIN= 000104 G  |
| ZF.DDM= 000001   | ZF.MAN= 020000 | ZS.ASN= 100000 | Z.MAP= 000020 | \$\$\$SYS= 004374 |
| ZF.DIA= 004000   | ZF.MFL= 000010 | ZS.BSY= 140000 | Z.NAM= 000004 | \$\$\$SYX= 000000 |
| ZF.DLC= 000002   | ZF.MTM= 000400 | Z.AVL= 000014  | Z.PCB= 000012 | ..OFF.= 177732    |
| ZF.DVP= 100000   | ZF.MUX= 000040 | Z.DAT= 000016  |               |                   |

. ABS. 177776 000 (RW,I,GBL,ABS,OVR)  
000500 001 (RW,I,LCL,REL,CON)

Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 309  
Work file writes: 214  
Size of work file: 41034 Words ( 161 Pages)  
Size of core pool: 17608 Words ( 67 Pages)  
Operating system: RSX-11M/PLUS

Elapsed time: 00:00:42.54

SY:CIRMAP.V2,[135,134]CIRMAP/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]CIRMAP

```

53          .SBTTL  MACRO CALLS AND LOCAL DATA
54          ;
55          ; MACRO LIBRARY CALLS
56          ;
57          .MCALL  MANDF$,SAVRG,RESRG,CICCX$
58          ;
59          000000          MANDF$          ; DEFINE NETWORK MANAGEMENT SYMBOLS
60          ;
61          ; LOCAL DEFINITIONS
62          ;
63          ;
64          ; CONTEXT AREA OFFSET DEFINITIONS
65          ;
66          000000          ;
67          ;          CICCX$          LIST
          ;
          ; CONTEXT AREA OFFSET DEFINITIONS
          ;
          000000          .ASECT
          000000          = 0
          000020          L$NLEN = 16.          ; MAXIMUM NAME LENGTH
          ;
          ; The offsets L$NAM to L$PDV inclusive must appear in the same order
          ; as in the CIRCX$ and LOCCX$ macros.
          ;
          000000          L$NAM:
          000000          L$DDM: .BLKW 1          ; DEVICE NAME
          000002          L$CTL: .BLKB 1          ; CONTROLLER NUMBER
          000003          L$UNT: .BLKB 1          ; UNIT NUMBER
          000004          L$PVC: .BLKW 1          ; 3RD WORD OF PVC NAME
          000020          = 0+L$NLEN          ; SPACE FOR EXPANDED CIRCUIT NAME
          000040          L$SCN: .BLKB L$NLEN          ; CURRENT NAME IN WILDCARD SCAN
          000041          L$TRB: .BLKB 1          ; TRIBUTARY NUMBER
          000042          L$PFG: .BLKB 1          ; PARSE FLAGS
          000044          L$SLT: .BLKW 1          ; Current SLT/PVC address
          000046          L$NXT: .BLKW 1          ; Pointer to next SLT/PVC address
          000050          L$SNM: .BLKW 1          ; REMAINING NUMBER OF SYSTEM LINES
          000052          L$TPT: .BLKW 1          ; Current tributary pointer (-1 for PSI)
          000053          L$TNM: .BLKB 1          ; REMAINING NUMBER OF TRIBUTARIES
          000054          L$CTB: .BLKB 1          ; CURRENT TRIBUTARY NUMBER
          000055          L$CHN: .BLKB 1          ; Channel number / X.25 port number and
          000056          L$PDV: .BLKB 1          ; ... PDV assigned
          000060          L$MSG: .BLKW 1          ; ERROR MESSAGE STRING POINTER
          000062          L$BUF: .BLKW 1          ; SAVED BUFFER POINTER
          000063          L$OPT: .BLKB 1          ; SAVED OPTIONS BYTE
          000064          L$TYP: .BLKB 1          ; CIRCUIT-ID FORMAT TYPE
          000066          L$FLG: .BLKW 1          ; FLAG WORD (FOR COMMAND)
          000070          L$FL1: .BLKW 1          ; FLAG WORD (FOR COMMAND)
          000072          L$FL2: .BLKW 1          ; FLAG WORD (FOR CURRENT CIRCUIT)
          000074          L$PAR: .BLKW 1          ; CURRENT PARAMETER TYPE
          000075          L$SLEN: .BLKB 1          ; Significant length of circuit name
          000076          L$PRO: .BLKB 1          ; Line protocol
          000100          L$MTYP: .BLKB 1          ; Network management circuit type
          000101          L$FLX: .BLKW 1          ; Flags word for X.25 circuit commands
          000102          L$STA: .BLKB 1          ; CIRCUIT STATE
          000102          L$COS: .BLKB 1          ; CIRCUIT COST
          000102          L$OWN: .BLKB 1          ; CIRCUIT OWNER (PDV INDEX)

```

CIZEIN      CREATED BY    MACRO    ON 29-JUN-85 AT 12:20

PAGE 4      I 7

MACRO CROSS REFERENCE

CREF    04.00

| MACRO NAME | REFERENCES |
|------------|------------|
|------------|------------|

|         |       |      |
|---------|-------|------|
| CALL    | 6-136 |      |
| CICCX\$ | #5-57 | 5-67 |
| MANDF\$ | #5-57 | 5-59 |
| RESRG   | #5-57 |      |
| RETURN  | 6-151 |      |
| SAVRG   | #5-57 |      |
| SOB     | 6-125 |      |

DACOU      CREATED BY MACRO ON 29-JUN-85 AT 12:21      PAGE 1      I 8  
 SYMBOL CROSS REFERENCE      CREF      04.00

| SYMBOL  | VALUE      | REFERENCES                                              |
|---------|------------|---------------------------------------------------------|
| BIT0    | = 000001   | #7-62                                                   |
| BIT1    | = 000002   | #7-62                                                   |
| BIT10   | = 002000   | #7-62                                                   |
| BIT11   | = 004000   | #7-62                                                   |
| BIT12   | = 010000   | #7-62                                                   |
| BIT13   | = 020000   | #7-62      9-88      9-93      9-94      9-95      9-96 |
| BIT14   | = 040000   | #7-62                                                   |
| BIT15   | = 100000   | #7-62      9-88      9-93      9-94      9-95      9-96 |
| BIT2    | = 000004   | #7-62                                                   |
| BIT3    | = 000010   | #7-62                                                   |
| BIT4    | = 000020   | #7-62                                                   |
| BIT5    | = 000040   | #7-62                                                   |
| BIT6    | = 000100   | #7-62                                                   |
| BIT7    | = 000200   | #7-62                                                   |
| BIT8    | = 000400   | #7-62                                                   |
| BIT9    | = 001000   | #7-62                                                   |
| B\$10   | 000003     | #6-62                                                   |
| B\$11   | 000004     | #6-62                                                   |
| B\$12   | 000005     | #6-62                                                   |
| B\$5    | 000000     | #6-62                                                   |
| B\$6    | 000001     | #6-62                                                   |
| B\$7    | 000002     | #6-62                                                   |
| B\$7S10 | 000006     | #6-62                                                   |
| ACIR    | 000040 RG  | #10-120                                                 |
| DALIN   | 000030 RG  | #10-117                                                 |
| DATB0   | 000000 R   | #9-88      10-134                                       |
| DATB1   | 000006 R   | #9-93      10-138                                       |
| FMTCOU  | = ***** GX | 10-136      10-139                                      |
| KISAR6  | = ***** GX | 10-122      *10-124      *10-140                        |
| LF\$END | = 000020   | #7-62                                                   |
| LF\$MLT | = 040000   | #7-62                                                   |
| LF\$REA | = 000001   | #7-62                                                   |
| LF\$SEG | = 100000   | #7-62                                                   |
| LF\$SIG | = 000040   | #7-62                                                   |
| LF\$SKP | = 000004   | #7-62                                                   |
| LF\$VR2 | = 000010   | #7-62      10-118                                       |
| LF\$ZER | = 000002   | #7-62                                                   |
| LF.ACT  | = 100000   | #5-57                                                   |
| LF.BRO  | = 000400   | #5-57                                                   |
| LF.BWT  | = 000007   | #5-57                                                   |
| LF.ENA  | = 002000   | #5-57                                                   |
| LF.LPB  | = 001000   | #5-57                                                   |
| LF.MDC  | = 000100   | #5-57                                                   |
| LF.MFL  | = 004000   | #5-57                                                   |
| LF.MTP  | = 000020   | #5-57                                                   |
| LF.PAC  | = 000200   | #5-57                                                   |
| LF.RDY  | = 040000   | #5-57                                                   |
| LF.REA  | = 010000   | #5-57                                                   |
| LF.SER  | = 000040   | #5-57                                                   |
| LF.TIM  | = 000010   | #5-57                                                   |
| LF.UNL  | = 020000   | #5-57                                                   |
| LF.X2P  | = 000000   | #5-57                                                   |



DCPCOU - READ/AND OR ZERO DCP C MACRO V05.03b Saturday 29-Jun-85 12:21 Page 8  
DISPATCH TABLE ENTRY

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```
.SBTTL DISPATCH TABLE ENTRY
:
: GENERATE AN ENTRY IN THE DISPATCH TABLES OF THE
: LINE AND CIRCUIT READ COUNTER MODULES.
:
: IF DF R$$$11S ! S$$$BAS ! R$$$RTR ! R$$$PRO
:
: PSECT $$$DLLO
:
: WORD *RDCP,DCPLIN ; READ LINE COUNTERS ENTRYPOINT
:
: PSECT $$$DLCO
:
: WORD *RDCP,DCPCIR ; READ CIRCUIT COUNTERS ENTRYPOINT
:
: PSECT
:
: ENDC
```

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.TITLE DEALUN - DEASSIGN TEMPORARY LUN  
.IDENT /V05.00/

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MODULE DESCRIPTION:

NETWORK MANAGEMENT - DEASSIGN TEMPORARY LUN FOR REUSE

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

IDENT HISTORY:

1.00 14-DEC-79  
DECNET-11M/S V3.0  
DECNET-11M-PLUS V1.0

2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1

4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0

4.01 17-OCT-84 RJK  
Change Symbols for Vectoring Comm Exec

5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-Plus V3.0  
DECnet-Micro/RSX V1.0

```

69      .SBTTL $PRLCO- Read and zero DLC LINE counters
70      .SBTTL $PRCCO- Read and zero DLC CIRCUIT counters
71
72      +
73      ***$PRLCO- Read and zero DLC LINE counters
74      ***$PRCCO- Read and zero DLC CIRCUIT counters
75
76      Inputs:
77      R3 = address of next free byte in buffer
78      R4 = address of the context area
79
80      Outputs:
81      Carry clear:    success or
82                    no information: invalid station number or function not
83                    supported by DLC.
84      Carry set:      resource allocation failure or process error
85
86      R0 = NICE return code
87      R3 = address of next free byte in buffer
88
89      Registers:
90      R4 is preserved
91      -
92
93      $PRLCO::
94      TST      (PC)+          ; Carry clear for LINE counters
95
96      $PRCCO::
97      SEC      ; Carry set for CIRCUIT counters
98      ROR      ENTITY        ; Save entity type
99      CALL     RQSTCO        ; Request process counters
100     BCC      10$           ; If CC, success
101     JMP      70$           ; If CS, request failed
102     10$:     CALL     FORK    ; Else, wait for completion from DLC
103     MOV      #MS.SUC,R0     ; Assume success
104     SWSTK$   70$           ; Enter system state
105     MOV      C.STS(R5),R1   ; Successful operation ?
106     BMI      60$           ; If M1, no
107     BIT      #LF$ZER,L$FLG(R4) ; Zeroing counters ?
108     BNE      45$           ; If NE, yes - go zero XPT counters
109
110     ; Copy counters into message buffer
111     MOV      C.CNT1(R5),R1   ; Pick up byte count
112     MOV      C.FLG+1(R5),R2 ; Check for preformatted counters
113     BPL      15$           ; If PL, not preformatted
114     MOV      R3,R0          ; Assume preformatted
115     CALL     COPY           ; else just copy info
116     MOV      R0,R3          ; update message pointer
117     BR       45$           ; return buffer and exit
118
119     ; Format returned information
120     15$:     SAVMAP
121     MOV      L$BUF(R4),R0    ; Save APR 6 mapping
122     MOV      R0,-(SP)        ; point to message buffer
123     ADD      -(R0),(SP)      ; Get address of message buffer
124     INC      R1              ; Point past message buffer
125     BIC      #1,R1          ; ensure an even allocation
126     ; for copy

```

DLCCOU CREATED BY MACRO ON 29-JUN-85 AT 12:22 PAGE 3 I 12  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES                                 |
|---------|----------|--------------------------------------------|
| L\$CTB  | 000053   | #6-62                                      |
| L\$CTL  | 000002   | #6-62                                      |
| L\$DDM  | 000000   | #6-62                                      |
| L\$FLG  | 000064   | #6-62 8-105 8-171 9-252 9-255 9-268 11-327 |
| L\$FLX  | 000070   | #6-62                                      |
| L\$LEN  | 000124   | #6-62                                      |
| L\$LTM  | 000070   | #6-62                                      |
| L\$MSG  | 000056   | #6-62                                      |
| L\$MTYP | 000067   | #6-62                                      |
| L\$NAM  | 000000   | #6-62                                      |
| L\$NLEN | = 000020 | #6-62 6-62 6-62                            |
| L\$NOD  | 000112   | #6-62                                      |
| L\$NXT  | 000044   | #6-62                                      |
| L\$OPT  | 000062   | #6-62                                      |
| L\$PAR  | 000120   | #6-62                                      |
| L\$PDV  | 000055   | #6-62 9-231                                |
| L\$PFG  | 000041   | #6-62 8-156 8-159                          |
| L\$PLB  | 000116   | #6-62                                      |
| L\$PRO  | 000067   | #6-62                                      |
| L\$PVC  | 000004   | #6-62                                      |
| L\$SCR  | 000020   | #6-62                                      |
| L\$SCR  | 000072   | #6-62                                      |
| L\$SLEN | 000066   | #6-62                                      |
| L\$SLT  | 000042   | #6-62 9-237                                |
| L\$SNM  | 000046   | #6-62                                      |
| L\$SYL  | 000122   | #6-62                                      |
| L\$TNM  | 000052   | #6-62                                      |
| L\$TPT  | 000050   | #6-62                                      |
| L\$TRB  | 000040   | #6-62                                      |
| L\$TSZ  | 000070   | #6-62                                      |
| L\$TYP  | 000063   | #6-62                                      |
| L\$UNT  | 000003   | #6-62                                      |
| L.COST  | 000015   | #5-57                                      |
| L.CTL   | 000012   | #5-57                                      |
| L.CVA   | 177776   | #5-57                                      |
| L.DDM   | 000002   | #5-57                                      |
| L.DDS   | 000004   | #5-57                                      |
| L.DLC   | 000003   | #5-57 9-238                                |
| L.DLM   | 000006   | #5-57                                      |
| L.DLS   | 000010   | #5-57                                      |
| L.FLG   | 000000   | #5-57                                      |
| L.KRBA  | 000016   | #5-57                                      |
| L.LEN   | = 000022 | #5-57                                      |
| L.MPF   | 000022   | #5-57                                      |
| L.NMST  | 000020   | #5-57                                      |
| L.NSTA  | 000014   | #5-57                                      |
| L.OWNR  | 000021   | #5-57                                      |
| L.UNT   | 000013   | #5-57                                      |
| ME.MPR  | 177773   | 9-258 11-354                               |
| ME.OPE  | 177747   | 8-192                                      |
| ME.RES  | 177761   | 9-225                                      |
| MS.SUC  | 000001   | 8-101                                      |

```

89          .SBTTL DLMCOU - READ AND/OR ZERO DLM COUNTERS
90
91          **--DLMCOU-READ AND/OR ZERO DLM COUNTERS
92
93          THIS ROUTINE RETURNS THE TRANSPORT COUNTERS FOR A DLM CIRCUIT
94
95          INPUTS:
96          R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
97          R4 = ADDRESS OF THE CONTEXT AREA
98
99          OUTPUTS:
100         R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
101
102         REGISTERS:
103         R4 IS PRESERVED
104
105
106 000006      DLMCOU::
107 000006      SWSTK$ 30$                ;; ENTER SYSTEM STATE
108 000012      SAVMAP                ;; SAVE CURRENT MAPPING
109 000016      CALL  FNDDLML          ;; FIND THE LINE TABLES
110 000022      BCS  20$              ;; IF CS, RETURN WITHOUT COUNTERS
111
112          SET UP R2 SO THAT THE PROPER COUNTERS ARE RETURNED:
113          0 = POINT-TO-POINT
114          -1 = MULTIPPOINT CONTROLLER COUNTERS
115          +1 = MULTIPPOINT TRIB COUNTERS
116
117 000024      012702 000001      MDV  #1,R2                ;; INDICATE MULTIPPOINT TRIB COUNTERS
118 000030      012705 000000'      MOV  #DLM1B0,R5          ;; POINT TO FIRST DCP TABLE
119 000034      SAVRG <R2>          ;; SAVE LINE-TYPE INDICATOR
120 000036      CALL  FMTCOU          ;; GET THE TIME COUNTER
121 000042      RESRG <R2>          ;; RESTORE BASE COUNTER INDICATOR
122 000044      CALL  XPTCDU          ;; GET THE TRANSPORT COUNTERS
123 000050      20$: RESMAP          ;; RESTORE PREVIOUS MAPPING
124 000054      010366 000010      MOV  R3,8.(SP)          ;; RETURN R3 IN SAVED R3
125 000060      30$: RETURN          ;; BACK TO USER STATE AND RETURN

```

DLXQIO - ISSUE I/O TO DLX      MACRO V05.03b Saturday 29-Jun-85 J 14 12:23  
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|    |     |                                   |
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| 6- | 70  | CONTEXT AREA OFFSET DEFINITIONS   |
| 7- | 78  | ERROR MESSAGE STRINGS             |
| 8- | 91  | DLXQIO - ISSUE I/O REQUEST TO NX: |
| 9- | 186 | DLXLUN - ASSIGN A LUN TO NX:      |

DLXQIO      CREATED BY    MACRO    ON 29-JUN-85 AT 12:23      PAGE 1      I 15

SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE       | REFERENCES           |
|---------|-------------|----------------------|
| DEALUN  | = ***** GX  | 9-202                |
| DLXERR  | = 000020 R  | #7-88 8-176          |
| DLXLUN  | = 000200 RG | #9-200               |
| DLXMSG  | = 000004 R  | #7-86                |
| DLXQIO  | = 000026 RG | #8-110               |
| DLXTXT  | = 000005 R  | #7-87 8-179          |
| FMTLIN  | = ***** GX  | 8-138                |
| G.LUNA  | = 000000    | 9-206                |
| IE.LPN  | = ***** GX  | 8-158                |
| IOSB    | = 000000 R  | #5-66 8-149 8-165    |
| LC\$NTL | = 000200    | #6-75                |
| LC\$OWN | = 000400    | #6-75                |
| LF\$MLT | = 040000    | #6-75                |
| LF\$REA | = 000001    | #6-75                |
| LF\$SEG | = 100000    | #6-75                |
| LF\$SKP | = 000004    | #6-75                |
| LF\$VR2 | = 000010    | #6-75                |
| LF\$ZER | = 000002    | #6-75                |
| LP\$MPT | = 000010    | #6-75                |
| LP\$MUX | = 000004    | #6-75                |
| LP\$NXC | = 100000    | #6-75                |
| LP\$TRB | = 000002    | #6-75                |
| LP\$UNT | = 000001    | #6-75                |
| LP\$WON | = 000040    | #6-75 6-75           |
| LP\$WCV | = 000020    | #6-75 6-75           |
| LP\$WLD | = 000360    | #6-75                |
| LP\$WTR | = 000200    | #6-75 6-75           |
| LP\$WUN | = 000100    | #6-75 6-75           |
| LS\$ACT | = 000040    | #6-75                |
| LS\$BBT | = 010000    | #6-75                |
| LS\$BLK | = 001000    | #6-75 6-75           |
| LS\$BSA | = 000001    | #6-75                |
| LS\$BSD | = 000002    | #6-75                |
| LS\$BSI | = 000004    | #6-75                |
| LS\$CHN | = 000001    | #6-75 6-75           |
| LS\$CMB | = 000002    | #6-75 6-75 6-75 6-75 |
| LS\$COS | = 000004    | #6-75                |
| LS\$CUS | = 000004    | #6-75 6-75           |
| LS\$DDT | = 001000    | #6-75                |
| LS\$DEA | = 000100    | #6-75                |
| LS\$DLM | = 001004    | #6-75                |
| LS\$DLT | = 002000    | #6-75                |
| LS\$DTE | = 000010    | #6-75 6-75           |
| LS\$HBT | = 000400    | #6-75                |
| LS\$HTM | = 010000    | #6-75                |
| LS\$INA | = 000010    | #6-75                |
| LS\$IND | = 000020    | #6-75                |
| LS\$INI | = 000040    | #6-75                |
| LS\$LCT | = 020000    | #6-75 6-75           |
| LS\$LMB | = 000002    | #6-75                |
| LS\$LOO | = 040000    | #6-75                |
| LS\$MDT | = 020000    | #6-75                |

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 Page 8

ERROR MESSAGE STRINGS

```
78                                     .SBTTL  ERROR MESSAGE STRINGS
79                                     :
80                                     : ERROR MESSAGE STRINGS
81                                     :
82                                     .ENABL  LC
83                                     :
84                                     : NOTE: THE NEXT THREE LINES MUST REMAIN CONTIGUOUS
85                                     :
86 000000                                DLXMSG: .BLKB 1 ; BUFFER FOR DLX STRING LENGTH
87 000001 104 114 130 DLXTXT: .ASCII /DLX error #/
88 000014                                DLXERR: .BLKB 6 ; BUFFER FOR DLX ERROR CODE
89                                .EVEN
```



|                    |                  |                  |                |                 |
|--------------------|------------------|------------------|----------------|-----------------|
| ASSC = 000000      | LDSLP = 000000   | LSLTM 000070     | MC\$BSC 001766 | MC\$SYL 000036  |
| ASSCPS = 000000    | LF\$END = 000020 | LSMSG 000056     | MC\$CAC 001442 | MC\$SYR 000050  |
| ASSPRI = 000000    | LF\$MLT = 040000 | LSMTYP 000067    | MC\$CAP 001440 | MC\$SYS 000024  |
| ASSTRP = 000000    | LF\$REA = 000001 | LSNAM 000000     | MC\$CCL 001445 | MC\$SYZ 000000  |
| BIT0 = 000001      | LF\$SEG = 100000 | LSNLEN = 000020  | MC\$CDC 002045 | MC\$TBR 001140  |
| BIT1 = 000002      | LF\$SIG = 000040 | LSNOD 000112     | MC\$CDP 001441 | MC\$TBS 001141  |
| BIT10 = 002000     | LF\$SKP = 000004 | LSNXT 000044     | MC\$CIF 001465 | MC\$TDR 002053  |
| BIT11 = 004000     | LF\$VR2 = 000010 | LSOPT 000062     | MC\$CLD 001464 | MC\$TIM 000000  |
| BIT12 = 010000     | LF\$ZER = 000002 | LSPAR 000120     | MC\$COU 100000 | MC\$TYP 007777  |
| BIT13 = 020000     | LF.ACT = 100000  | LSPDV 000055     | MC\$CTL 001454 | MC\$SUBU 002052 |
| BIT14 = 040000     | LF.BRO = 000400  | LSPLB 000041     | MC\$CTR 001452 | MC\$UFD 002047  |
| BIT15 = 100000     | LF.BWT = 000007  | LSPLB 000116     | MC\$CTS 001453 | MC\$UMR 001132  |
| BIT2 = 000004      | LF.ENA = 002000  | LSPRO 000067     | MC\$DOV 002050 | MC\$UMS 001133  |
| BIT3 = 000010      | LF.LPB = 001000  | LSPVC 000004     | MC\$LBR 001750 | MC\$VAX 000003  |
| BIT4 = 000020      | LF.MDC = 000100  | LS\$CN 000020    | MC\$LBS 001751 | MC\$WID 060000  |
| BIT5 = 000040      | LF.MFL = 004000  | LS\$CR 000072    | MC\$LDI 001774 | MC\$WIH 040000  |
| BIT6 = 000100      | LF.MTP = 000020  | LS\$LEN 000066   | MC\$LDO 001775 | MC\$WIL 020000  |
| BIT7 = 000200      | LF.PAC = 000200  | LS\$LT 000042    | MC\$LDR 001762 | MC\$W08 020000  |
| BIT8 = 000400      | LF.RDY = 040000  | LS\$NM 000046    | MC\$LDS 001763 | MC\$W16 040000  |
| BIT9 = 001000      | LF.REA = 010000  | LS\$YL 000122    | MC\$LLB 002021 | MC\$W32 060000  |
| BS10 000003        | LF.SER = 000040  | LS\$TNM 000052   | MC\$LLP 002115 | MC\$XBR 001750  |
| BS11 000004        | LF.TIM = 000010  | LS\$TPT 000050   | MC\$LLR 002007 | MC\$XBS 001751  |
| BS12 000005        | LF.UNL = 020000  | LS\$TRB 000040   | MC\$LOD 000001 | MC\$XCJ 000322  |
| BS5 000000         | LF.X2P = 000000  | LS\$TSZ 000070   | MC\$LRB 002020 | MC\$XCR 002260  |
| BS7 000001         | LN.CLO = 000000  | LS\$TYP 000063   | MC\$LRP 002114 | MC\$XCS 002261  |
| BS7S10 000002      | LN.DUM = 000005  | LSUNT 000003     | MC\$LRR 002006 | MC\$XDR 001762  |
| CIRECH = ***** GX  | LN.LOA = 000004  | LS\$ASG = 000000 | MC\$LSI 002032 | MC\$XDS 001763  |
| CIRECO = ***** GX  | LN.LOD = 000003  | LS\$DRV = 000000 | MC\$LST 002033 | MC\$XFR 002272  |
| CIREOP 000022RG    | LN.OAU = 000003  | LS\$P1 = 000001  | MC\$LUP 006072 | MC\$XFS 002273  |
| CIREST = ***** GX  | LN.OFF = 000001  | LS\$11R = 000000 | MC\$MAP 010000 | MC\$XLJ 000323  |
| CIZEOP 000022RG    | LN.ON = 000000   | L.COST 000015    | MC\$MBL 001764 | MC\$XLR 002330  |
| C\$SKP = 000000    | LN.OOP = 000004  | L.CTL 000012     | MC\$MBX 004420 | MC\$XMA 000310  |
| C\$SORE = 000400   | LN.OPE = 000001  | L.CVA 177776     | MC\$MBY 001752 | MC\$XMC 002305  |
| C\$SRSH = 177564   | LN.REF = 000002  | L.DDM 000002     | MC\$MPX 004406 | MC\$XMS 002304  |
| DISTBL 000000R     | LN.SER = 000002  | L.DDS 000004     | MC\$NAP 001604 | MC\$XNR 002332  |
| D\$BUG = 177514    | LN.STA = 000017  | L.DLC 000003     | MC\$NBR 001130 | MC\$XRC 002316  |
| D\$ISK = 000000    | LN.SUB = 000360  | L.DLM 000006     | MC\$NBS 001131 | MC\$XRR 002331  |
| D\$SL11 = 000001   | LN.TRI = 000006  | L.DLS 000010     | MC\$NCR 001154 | MC\$XRS 002342  |
| D\$SYNC = 000000   | LP\$MPT = 000010 | L.FLG 000000     | MC\$NCS 001155 | MC\$O20 000002  |
| D\$SYNM = 000000   | LP\$MUX = 000004 | L.KRBA 000016    | MC\$NML 001274 | MD\$CI 000007   |
| E\$XPR = 000000    | LP\$TRB = 000002 | L.LEN = 000022   | MC\$NMR 001142 | MD\$CNA 000003  |
| FMT CIR = ***** GX | LP\$UNT = 000001 | L.MPF 000022     | MC\$NMS 001143 | MD\$COU 000001  |
| F\$SLVL = 000001   | LP\$WCN = 000040 | L.NMST 000020    | MC\$NNO 001606 | MD\$DA 000010   |
| GET CIR 000226R    | LP\$WDV = 000020 | L.NSTA 000014    | MC\$NNU 001605 | MD\$DL 000004   |
| G\$STPP = 000000   | LP\$WLD = 000360 | L.OWNR 000021    | MC\$NOP 001607 | MD\$DLV 000020  |
| G\$STSS = 000000   | LP\$WTR = 000200 | L.UNT 000013     | MC\$NOR 000000 | MD\$DMC 000014  |
| G\$STTK = 000000   | LP\$WUN = 000100 | MB\$DTS 000001   | MC\$NFF 001616 | MD\$DMF 000046  |
| G\$SWRD = 000000   | LSADJ 000110     | MB\$ENA 000000   | MC\$NPR 001630 | MD\$DMP 000022  |
| IS\$RAR = 000000   | LSBUF 000060     | MB\$FUL 000002   | MC\$NRE 001200 | MD\$DMR 000050  |
| IS\$RDN = 000000   | LSCHN 000054     | MB\$MIX 000002   | MC\$NRT 001166 | MD\$DMV 000042  |
| K\$CNT = 177546    | LS\$COU 000114   | MB\$ONE 000001   | MC\$NVR 001642 | MD\$DN 000016   |
| K\$CSR = 177546    | LS\$CTB 000053   | MB\$RXO 000001   | MC\$P08 000000 | MD\$DP 000000   |
| K\$SLDC = 000000   | LS\$CTL 000002   | MB\$TXO 000000   | MC\$P11 000001 | MD\$DPV 000044  |
| K\$STPS = 000074   | LS\$DDM 000000   | MB\$ZER 000000   | MC\$RFL 002046 | MD\$DQ 000006   |
| LC\$EXT 000000     | LS\$FLG 000064   | MC\$BAB 006073   | MC\$SBU 002051 | MD\$DTE 000024  |
| LC\$INT 000001     | LS\$FLX 000070   | MC\$BID 001765   | MC\$SFL 002044 | MD\$DU 000002   |
|                    | LS\$LEN 000124   | MC\$BMC 001767   | MC\$SYC 000012 | MD\$DUP 000012  |

```
79      .SBTTL State mapping tables
80
81      : STATE MAPPING TABLE:
82      : INDEXED BY STATE KEPT IN THE NETWORK MANAGEMENT STATE BYTE
83      : IN THE SLT, RETURNS THE NICE PROTOCOL STATE.
84      :
85      : .IF DF R$$11S
86      : .PSECT NIXCOD          ; FORCE CODE TO APR6 FOR 11S
87      : .ENDC
88
89      000000      STATBL:
90      000000      .BYTE MS$ON          ; ON = ON
91      000001      .BYTE MS$OFF        ; OFF = OFF
92      000002      .BYTE MS$SER        ; SERVICE = SERVICE
93      000003      .BYTE MS$ON        ; ON, AUTOSERVICE = ON
94      000004      .BYTE MS$ON        ; ON, OPEN = ON
95
96      :
97      : SUB-STATE MAPPING TABLE (EACH ROW IS A STATE, EACH COLUMN A SUB-STATE)
98      : INDEXED BY ((STATE*7)+SUBSTATE) TO RETURN THE NICE PROTOCOL SUBSTATE.
99      : A -1 ENTRY MEANS NO SUB-STATE RETURNED
100     : A -2 ENTRY MEANS CONDITIONAL RETURN ON AN ADJACENT NODE BEING FOUND
101     :
102     .NLIST BEX
103     000005      SUBTBL:
104     :
105     : -- ON -----
106     :
107     000005      376      376      001      .BYTE -2, -2, MS$REF, MS$L0D, MS$L0A, MS$DUM, MS$TRI
108     :
109     : -- OFF -----
110     :
111     000014      377      377      377      .BYTE -1, -1, -1, -1, -1, -1, -1
112     :
113     : --- SERVICE -----
114     :
115     000023      377      377      001      .BYTE -1, -1, MS$REF, MS$L0D, MS$L0A, MS$DUM, MS$TRI
116     :
117     : -- ON, AUTOSERVICE -----
118     :
119     000032      006      006      001      .BYTE MS$ASE, MS$ASE, MS$REF, -1, MS$ALO, MS$ADU, MS$ATR
120     :
121     : -- ON, OPEN -----
122     :
123     000041      377      377      377      .BYTE -1, -1, -1, MS$L0D, MS$L0A, MS$DUM, MS$TRI
124     :
125     : -----
126     :
127     .LIST BEX
128
129     .IF DF R$$11S
130     .PSECT
131     .ENDC
132
133     000050      TEMP: .BLKW 1          ; temporary for transport block size
134
```

CIREST - READ CIRCUIT STATUS  
Symbol table

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|         |        |         |        |         |        |         |        |         |        |
|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| MC\$LS1 | 002033 | MC\$XFR | 002272 | MD.LSH  | 000020 | ME.SYS  | 177746 | MO\$OPT | 000001 |
| MC\$LUP | 006072 | MC\$XFS | 002273 | MD.NOB  | 000012 | ME.UCO  | 177770 | MO\$PER | 000200 |
| MC\$MAP | 010000 | MC\$XLJ | 000323 | MD.NON  | 177777 | MF\$ACT | 177776 | MO\$PRO | 000002 |
| MC\$MBL | 001764 | MC\$XLR | 002330 | MD.PER  | 000000 | MF\$ADD | 000000 | MO\$PRS | 000001 |
| MC\$MBX | 004420 | MC\$XMA | 000310 | MD.RES  | 000004 | MF\$ADJ | 177774 | MO\$REA | 000200 |
| MC\$MBY | 001752 | MC\$XMC | 002305 | MD.ROB  | 000005 | MF\$ALL | 177775 | MO\$SET | 000000 |
| MC\$MPX | 004406 | MC\$XMS | 002304 | MD.RSH  | 000013 | MF\$BYE | 000300 | MO\$STA | 000020 |
| MC\$NAP | 001604 | MC\$XNR | 002332 | MD.SDU  | 000005 | MF\$CHA | 000023 | MO\$SUM | 000000 |
| MC\$NBR | 001130 | MC\$XRC | 002316 | MD.SLO  | 000003 | MF\$DUM | 000020 | MO\$TSK | 000000 |
| MC\$NBS | 001131 | MC\$XRR | 002331 | MD.SNA  | 000000 | MF\$EVT | 000001 | MO\$VOL | 000000 |
| MC\$NCR | 001154 | MC\$XRS | 002342 | MD.TLO  | 000004 | MF\$FUP | 000264 | MO\$ZER | 000000 |
| MC\$NCS | 001155 | MC\$O20 | 000002 | MD.UNA  | 000002 | MF\$KNO | 177777 | MP\$ACB | 000012 |
| MC\$NML | 001274 | MD\$CI  | 000007 | MD.UNR  | 000003 | MF\$LOA | 000017 | MP\$ACC | 000514 |
| MC\$NMR | 001142 | MD\$CNU | 000003 | MD.UOB  | 000007 | MF\$LOO | 177775 | MP\$ACT | 004526 |
| MC\$NMS | 001143 | MD\$COU | 000001 | MD.VOL  | 000006 | MF\$REA | 000024 | MP\$ADD | 000766 |
| MC\$NNO | 001606 | MD\$DA  | 000010 | ME\$ALI | 000010 | MF\$SIG | 177773 | MP\$ADJ | 001440 |
| MC\$NNU | 001605 | MD\$DL  | 000004 | ME\$AL2 | 000003 | MF\$SPF | 000302 | MP\$ADP | 006325 |
| MC\$NDP | 001607 | MD\$DLV | 000020 | ME\$ARE | 000005 | MF\$SYS | 000026 | MP\$ADS | 004406 |
| MC\$NOR | 000000 | MD\$DMC | 000014 | ME\$CIR | 000003 | MF\$TES | 000022 | MP\$ALB | 000036 |
| MC\$NPF | 001616 | MD\$DMF | 000046 | ME\$EYA | 000000 | MF\$TRA | 000301 | MP\$AMC | 001640 |
| MC\$NPR | 001630 | MD\$DMP | 000022 | ME\$EXE | 000200 | MF\$TRI | 000021 | MP\$AMH | 001641 |
| MC\$NRE | 001200 | MD\$DMR | 000050 | ME\$LIN | 000001 | MF\$ZER | 000025 | MP\$ANB | 004420 |
| MC\$NRT | 001166 | MD\$DMV | 000042 | ME\$LOG | 000002 | ML\$ALL | 100000 | MP\$ASB | 000024 |
| MC\$NVR | 001642 | MD\$DN  | 000016 | ME\$MOD | 000004 | ML\$CLS | 000000 | MP\$ASC | 004432 |
| MC\$P08 | 000000 | MD\$DP  | 000000 | ME\$NOD | 000000 | ML\$CON | 000001 | MP\$AUS | 000512 |
| MC\$P11 | 000001 | MD\$DPV | 000044 | ME\$NON | 177777 | ML\$EXT | 000001 | MP\$BBT | 002165 |
| MC\$RFL | 002046 | MD\$DQ  | 000006 | ME\$OBJ | 000007 | ML\$FIL | 000002 | MP\$BDF | 002164 |
| MC\$SBU | 002051 | MD\$DTE | 000024 | ME\$OB2 | 000004 | ML\$FIR | 000000 | MP\$BFQ | 002121 |
| MC\$SFL | 002044 | MD\$DU  | 000002 | ME\$PRO | 000005 | ML\$INT | 000000 | MP\$BLK | 001616 |
| MC\$SYL | 000012 | MD\$DUP | 000012 | ME\$SYS | 000006 | ML\$KND | 140000 | MP\$BLO | 001452 |
| MC\$SYL | 000036 | MD\$DV  | 000026 | ME.BLO  | 177744 | ML\$MDN | 000003 | MP\$BMX | 002176 |
| MC\$SYR | 000050 | MD\$DZ  | 000030 | ME.CON  | 177753 | ML\$SYS | 000002 | MP\$BNP | 006330 |
| MC\$SYZ | 000024 | MD\$FUL | 000000 | ME.CST  | 177765 | ML\$TOP | 000001 | MP\$BRT | 001620 |
| MC\$SYZ | 000000 | MD\$HAL | 000001 | ME.DIS  | 177755 | MN\$UNL | 000377 | MP\$BSA | 002176 |
| MC\$TBR | 001140 | MD\$HEL | 000002 | ME.DON  | 177600 | MO\$ACC | 000200 | MP\$BSD | 002203 |
| MC\$TBS | 001141 | MD\$KCP | 000013 | ME.FCO  | 177762 | MO\$ADD | 000002 | MP\$BSI | 002200 |
| MC\$TDR | 002053 | MD\$KDP | 000034 | ME.FIO  | 177756 | MO\$ALA | 000004 | MP\$BSP | 006331 |
| MC\$TIM | 000000 | MD\$KDZ | 000036 | ME.FOP  | 177763 | MO\$ALI | 000000 | MP\$BUF | 000170 |
| MC\$TYP | 007777 | MD\$KL  | 000040 | ME.FOR  | 177776 | MO\$CHA | 000040 | MP\$BUP | 006324 |
| MC\$UBU | 002052 | MD\$KMX | 000054 | ME.FUN  | 177777 | MO\$CIR | 000003 | MP\$EUS | 001643 |
| MC\$UFD | 002047 | MD\$KMY | 000052 | ME.GRD  | 177745 | MO\$CLE | 000100 | MP\$CAC | 001750 |
| MC\$UMR | 001132 | MD\$LEN | 000050 | ME.HAR  | 177750 | MO\$COU | 000060 | MP\$CAS | 001762 |
| MC\$UMS | 001133 | MD\$PLC | 000011 | ME.IID  | 177767 | MO\$DAC | 000000 | MP\$CAT | 002210 |
| MC\$VAX | 000003 | MD\$QNA | 000005 | ME.LCO  | 177766 | MO\$DEF | 000000 | MP\$CCS | 004406 |
| MC\$WID | 060000 | MD\$UNA | 000001 | ME.LPR  | 177757 | MO\$DPR | 000000 | MP\$CHN | 002141 |
| MC\$WIH | 040000 | MD\$WIT | 000002 | ME.MPR  | 177773 | MO\$ENT | 000017 | MP\$CIR | 000144 |
| MC\$WIL | 020000 | MD.ABO  | 000017 | ME.MVE  | 177771 | MO\$EVE | 000100 | MP\$CLK | 002131 |
| MC\$WOB | 020000 | MD.ACC  | 000010 | ME.OPE  | 177747 | MO\$INF | 000160 | MP\$CLN | 002126 |
| MC\$W16 | 040000 | MD.AOB  | 000016 | ME.PLO  | 177751 | MO\$INS | 000002 | MP\$CLT | 002211 |
| MC\$W32 | 060000 | MD.BOB  | 000011 | ME.PMI  | 177743 | MO\$LIN | 000001 | MP\$CMH | 002142 |
| MC\$XBR | 001750 | MD.DIA  | 000007 | ME.PNA  | 177752 | MO\$LOG | 000001 | MP\$CMK | 000537 |
| MC\$XBS | 001751 | MD.DOB  | 000015 | ME.PRI  | 177775 | MO\$MIR | 000031 | MP\$CMX | 002153 |
| MC\$XCJ | 000322 | MD.DUM  | 000022 | ME.PTY  | 177772 | MO\$NAM | 000001 | MP\$CND | 000310 |
| MC\$XCR | 002260 | MD.FAI  | 000014 | ME.PVA  | 177760 | MO\$NIC | 000023 | MP\$CNU | 001753 |
| MC\$XCS | 002261 | MD.FNA  | 000001 | ME.RES  | 177761 | MO\$NOD | 000000 | MP\$COB | 000311 |
| MC\$XDR | 001762 | MD.FOB  | 000006 | ME.ROO  | 177754 | MO\$OFF | 000001 | MP\$CON | 002126 |
| MC\$XDS | 001763 | MD.LOA  | 000001 | ME.SIZ  | 177774 | MO\$ON  | 000000 | MP\$COS | 001604 |

```

54      .SBTTL  MACRO CALLS AND LOCAL DATA
55
56      ;
57      ; MACRO LIBRARY CALLS
58      ;
59      .MCALL  MANDF$,SAVRG,RESRG,PDVDF$,SLTDF$,DMPDF$
60      .MCALL  SAVMAP,MAP,RESMAP,PCLDF$,DDCDF$,RETC,BIAS,CEACC$,CICCX$
61      MANDF$      ; DEFINE NETWORK MANAGEMENT SYMBOLS
62      DMPDF$      ; DEFINE DMP LINE TABLE OFFSETS
63      PDVDF$      ; DEFINE PDV OFFSETS
64      SLTDF$      ; DEFINE SLT OFFSETS
65      DDCDF$      ; DEFINE DDCMP STATION TABLE OFFSETS
66      PCLDF$      ; DEFINE PCL LINE TABLE OFFSETS
67
68      ; LOCAL DEFINITIONS
69      ;
70      000002      RBIAS=2      ; WE MUST ACCOUNT FOR SAVED KISAR6
71
72      ;
73      ; CONTEXT AREA OFFSET DEFINITIONS
74      ;
75
76      000000      CICCX$      LIST
77
78      ;
79      ; CONTEXT AREA OFFSET DEFINITIONS
80      ;
81      000210      .ASECT
82      000000      = 0
83      000020      L$NLEN = 16.      ; MAXIMUM NAME LENGTH
84
85      ;
86      ; The offsets L$NAM to L$PDV inclusive must appear in the same order
87      ; as in the CIRCX$ and LOCCX$ macros.
88      ;
89      L$NAM:
90      L$DDM: .BLKW 1      ; DEVICE NAME
91      L$CTL: .BLKB 1      ; CONTROLLER NUMBER
92      L$UNT: .BLKB 1      ; UNIT NUMBER
93      L$PVC: .BLKW 1      ; 3RD WORD OF PVC NAME
94      ; = 0+L$NLEN      ; SPACE FOR EXPANDED CIRCUIT NAME
95      L$SCN: .BLKB L$NLEN ; CURRENT NAME IN WILDCARD SCAN
96      L$TRB: .BLKB 1      ; TRIBUTARY NUMBER
97      L$PFG: .BLKB 1      ; PARSE FLAGS
98      L$SLT: .BLKW 1      ; Current SLT/PVC address
99      L$NXT: .BLKW 1      ; Pointer to next SLT/PVC address
100     L$SNM: .BLKW 1      ; REMAINING NUMBER OF SYSTEM LINES
101     L$TPT: .BLKW 1      ; Current tributary pointer (-1 for PSI)
102     L$TNM: .BLKB 1      ; REMAINING NUMBER OF TRIBUTARIES
103     L$CTB: .BLKB 1      ; CURRENT TRIBUTARY NUMBER
104     L$CHN: .BLKB 1      ; Channel number / X.25 port number and
105     L$PDV: .BLKB 1      ; ... PDV assigned
106     L$MSG: .BLKW 1      ; ERROR MESSAGE STRING POINTER
107     L$BUF: .BLKW 1      ; SAVED BUFFER POINTER
108     L$OPT: .BLKB 1      ; SAVED OPTIONS BYTE
109     L$TYP: .BLKB 1      ; CIRCUIT-ID FORMAT TYPE
110     L$FLG: .BLKW 1      ; FLAG WORD (FOR COMMAND)
111     L$FL1: .BLKW 1      ; FLAG WORD (FOR COMMAND)
112     L$FL2: .BLKW 1      ; FLAG WORD (FOR CURRENT CIRCUIT)

```

CIRMAP CREATED BY MACRO ON 29-JUN-85 AT 12:20 PAGE 1 J 5  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE      | REFERENCES                             |
|---------|------------|----------------------------------------|
| BF.TRC  | = 000004   | #5-66                                  |
| DF.CRC  | = 000010   | #5-66                                  |
| DF.FOC  | = 000020   | #5-66                                  |
| DF.RAN  | = 000040   | #5-66                                  |
| DF.UNK  | = 000100   | #5-66                                  |
| FNDDCP  | = ***** GX | 6-122 7-177 8-222                      |
| FNDNDP  | = ***** GX | 6-122                                  |
| FNDPCL  | = ***** GX | 6-129                                  |
| IS\$AS  | = *****    | 5-63                                   |
| KISAR6  | = ***** GX | 6-121 *6-144 7-176 *7-183 8-221 *8-228 |
| LC\$NTL | = 000200   | #5-76                                  |
| LC\$OWN | = 000400   | #5-76                                  |
| LF\$MLT | = 040000   | #5-76                                  |
| LF\$REA | = 000001   | #5-76                                  |
| LF\$SEG | = 100000   | #5-76                                  |
| LF\$SKP | = 000004   | #5-76                                  |
| LF\$VR2 | = 000010   | #5-76                                  |
| LF\$ZER | = 000002   | #5-76                                  |
| LF.ACT  | = 100000   | #5-64 6-113                            |
| LF.BRO  | = 000400   | #5-64                                  |
| LF.BWT  | = 000007   | #5-64                                  |
| LF.ENA  | = 002000   | #5-64                                  |
| LF.LPB  | = 001000   | #5-64                                  |
| LF.MDC  | = 000100   | #5-64                                  |
| LF.MFL  | = 004000   | #5-64                                  |
| LF.MTP  | = 000020   | #5-64 6-105                            |
| LF.PAC  | = 000200   | #5-64                                  |
| LF.RDY  | = 040000   | #5-64                                  |
| LF.REA  | = 010000   | #5-64                                  |
| LF.SER  | = 000040   | #5-64                                  |
| LF.TIM  | = 000010   | #5-64                                  |
| LF.UNL  | = 020000   | #5-64                                  |
| LF.X2P  | = 000000   | #5-64                                  |
| LN.CLO  | = 000000   | #5-64                                  |
| LN.DUM  | = 000005   | #5-64                                  |
| LN.LOA  | = 000004   | #5-64                                  |
| LN.LOO  | = 000003   | #5-64                                  |
| LN.OAU  | = 000003   | #5-64                                  |
| LN.OFF  | = 000001   | #5-64                                  |
| LN.ON   | = 000000   | #5-64                                  |
| LN.OOP  | = 000004   | #5-64                                  |
| LN.OPE  | = 000001   | #5-64                                  |
| LN.REF  | = 000002   | #5-64                                  |
| LN.SER  | = 000002   | #5-64                                  |
| LN.STA  | = 000017   | #5-64                                  |
| LN.SUB  | = 000360   | #5-64                                  |
| LN.TRI  | = 000006   | #5-64                                  |
| LP\$MPT | = 000010   | #5-76 7-172 8-215                      |
| LP\$MUX | = 000004   | #5-76                                  |
| LP\$NYC | = 100000   | #5-76                                  |
| LP\$TRB | = 000002   | #5-76 8-217                            |
| LP\$UNT | = 000001   | #5-76                                  |

```

000103      L$TAD: .BLKB 1      ; TRIBUTARY ADDRESS
000104      L$ACT: .BLKB 1      ; MULTIPOINT ACTIVE RATIO
000105      L$DEA: .BLKB 1      ; MULTIPOINT DEAD RATIO
000106      L$DDT: .BLKW 1      ; DMP DEAD TIMER
000110      L$DLT: .BLKW 1      ; DMP DELAY TIMER
000112      L$PLT: .BLKW 1      ; DMP POLL TIMER
000114      L$BBT: .BLKW 1      ; DMP BABBLE TIMER
000116      L$NMT: .BLKW 1      ; DMP NORMAL TIMER
000120      L$XMT: .BLKW 1      ; DMP TRANSMIT TIMER
000122      L$BSA: .BLKB 1      ; DMP ACTIVE BASE
000123      L$BSD: .BLKB 1      ; DMP DYING BASE
000124      L$BSI: .BLKB 1      ; DMP INACTIVE BASE
000125      L$INA: .BLKB 1      ; DMP ACTIVE INCREMENT
000126      L$IND: .BLKB 1      ; DMP DYING INCREMENT
000127      L$INI: .BLKB 1      ; DMP INACTIVE INCREMENT
000130      L$TH1: .BLKB 1      ; DMP DEAD THRESHOLD
000131      L$TH2: .BLKB 1      ; DMP DYING THRESHOLD
000132      L$TH3: .BLKB 1      ; DMP INACTIVE THRESHOLD
000133      L$MXB: .BLKB 1      ; DMP MAXIMUM BLOCKS
000134      L$NTL: .BLKW 13.    ; NTL MESSAGE BUFFER
000166      L$SCR: .BLKW 15.   ; SCRATCH BUFFER
000224      L$LCT: .BLKW 1      ; COUNTER TIMER
000226      L$HTM: .BLKW 1      ; HELLO TIMER
000230      L$SER: .BLKW 1      ; SERVICE
000230      L$LTM: .BLKW 1      ; LISTEN TIMER
000232      L$XCH: .BLKW 1      ; X25 Logical Channel Number (LCN)
000234      L$LMB: .BLKW 1      ; X25 Max Block (Line)
000234      L$CMB: .BLKW 1      ; X25 Max Data (Circuit)
000236      L$NUML: .BLKW 1      ; DLM Number length
000236      L$DTEL: .BLKW 1      ; X25 DTE length (Circuit)
000240      L$NUM: .BLKW 1      ; DLM Number
000240      L$DTE: .BLKB 8.    ; X25 DTE (Circuit)
000250      L$DTEP: .BLKW 1     ; X25 Pointer to DTE descriptor (Circuit)
000252      L$MWN: .BLKW 1     ; X25 Max Window (Line)
000252      L$MXW: .BLKB 1     ; X25 Max Window (Circuit)
000253      L$MRT: .BLKW 1     ; X25 Max Retransmits (Line)
000253      L$MXR: .BLKB 1     ; DLM Max Recalls (Circuit)
000254      L$HBT: .BLKW 1     ; X25 Holdback Timer (Line)
000256      L$NTI: .BLKW 1     ; X25 Retransmit Timer (Line)
000256      L$RET: .BLKW 1     ; DLM Recall Timer (Circuit)
000260      L$CUS: .BLKW 1     ; DLM Usage
000262      L$BLK: .BLKW 1     ; DLM blocking state
          .IF DF R$$PRO ;PRO/DEChet
          L$LTY: .BLKW 1      ; Loopback Type
          L$MDT: .BLKW 1      ; Modem Test
          .ENDC ; DF R$$PRO
          .EVEN

000264      L$LEN: .PSECT      ; LENGTH OF CONTEXT AREA
000000

;
; FLAGS WORD BIT DEFINITIONS (L$FLG)
;
000001      LF$REA = 1      ; READ COUNTERS OPERATION
000002      LF$ZER = 2      ; ZERO COUNTERS OPERATION
000004      LF$SKP = 4      ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                          ; THIS IS USED TO FORCE AN EXTRA PASS
                          ; FOR A MULTIPOINT LINE TO RETURN THE

```

\*\*FILE\*\*ID\*\*DACOU

```

DDDDDDDD      AAAAAA      CCCCCCCC      000000      UU      UU
DDDDDDDD      AAAAAA      CCCCCCCC      000000      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AAAAAAAA      CC      00      00      UU      UU
DD      DD      AAAAAAAA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DD      DD      AA      AA      CC      00      00      UU      UU
DDDDDDDD      AA      AA      CCCCCCCC      000000      UUUUUUUUUU      ....
DDDDDDDD      AA      AA      CCCCCCCC      000000      UUUUUUUUUU      ....

```

```

LL      SSSSSSSS      TTTTTTTTTT
LL      SSSSSSSS      TTTTTTTTTT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SSSSSS      TT
LL      SSSSSS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LL      SS      TT
LLLLLLLLLL      SSSSSSSS      TT
LLLLLLLLLL      SSSSSSSS      TT

```

SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES      |
|---------|----------|-----------------|
| LN.CLO  | = 000000 | #5-57           |
| LN.DUM  | = 000005 | #5-57           |
| LN.LOA  | = 000004 | #5-57           |
| LN.LOO  | = 000003 | #5-57           |
| LN.OAU  | = 000003 | #5-57           |
| LN.OFF  | = 000001 | #5-57           |
| LN.ON   | = 000000 | #5-57           |
| LN.OOP  | = 000004 | #5-57           |
| LN.OPE  | = 000001 | #5-57           |
| LN.REF  | = 000002 | #5-57           |
| LN.SER  | = 000002 | #5-57           |
| LN.STA  | = 000017 | #5-57           |
| LN.SUB  | = 000360 | #5-57           |
| LN.TRI  | = 000006 | #5-57           |
| LP\$MPT | = 000010 | #7-62           |
| LP\$MUX | = 000004 | #7-62           |
| LP\$TRB | = 000002 | #7-62           |
| LP\$UNT | = 000001 | #7-62           |
| LP\$WCN | = 000040 | #7-62 7-62      |
| LP\$WDV | = 000020 | #7-62 7-62      |
| LP\$WLD | = 000360 | #7-62           |
| LP\$WTR | = 000200 | #7-62 7-62      |
| LP\$WUN | = 000100 | #7-62 7-62      |
| L\$ADJ  | 000110   | #6-62           |
| L\$BUF  | 000060   | #6-62           |
| L\$CHN  | 000054   | #6-62           |
| L\$COU  | 000114   | #6-62           |
| L\$CTB  | 000053   | #6-62           |
| L\$CTL  | 000002   | #6-62           |
| L\$DDM  | 000000   | #6-62           |
| L\$FLG  | 000064   | #6-62 10-118    |
| L\$FLX  | 000070   | #6-62           |
| L\$LEN  | 000124   | #6-62           |
| L\$LTM  | 000070   | #6-62           |
| L\$MSG  | 000056   | #6-62           |
| L\$MTYP | 000067   | #6-62           |
| L\$NAM  | 000000   | #6-62           |
| L\$NLEN | = 000020 | #6-62 6-62 6-62 |
| L\$NOD  | 000112   | #6-62           |
| L\$NXT  | 000044   | #6-62           |
| L\$OPT  | 000062   | #6-62           |
| L\$PAR  | 000120   | #6-62           |
| L\$PDV  | 000055   | #6-62           |
| L\$PFG  | 000041   | #6-62           |
| L\$PLB  | 000116   | #6-62           |
| L\$PRO  | 000067   | #6-62           |
| L\$PVC  | 000004   | #6-62           |
| L\$SCN  | 000020   | #6-62           |
| L\$SCR  | 000072   | #6-62           |
| L\$SLEN | 000066   | #6-62           |
| L\$SLT  | 000042   | #6-62 10-123    |
| L\$SNM  | 000046   | #6-62           |



```

83      .SBTTL  DCPTB? - DDCMP COUNTER TABLES
84      :
85      : DDCMP TABLE 0 - NETWORK MANAGEMENT LAYER (DDCMP LINE TABLE)
86      :
87      DCPCIO: DLC0U$ 0.16.,S.TIMC,R1      ; SECONDS SINCE LAST ZEROED (STATION)
88      DCPLNO: DLC0U$ 0.16.,L.TIMC,R0      ; SECONDS SINCE LAST ZEROED (CONTROLLER)
89      DLC0U$ END
90
91      :
92      : DDCMP TABLE 1 - DATA LINK LAYER (DDCMP LINE AND STATION TABLES)
93      :
94      DCPCII: DLC0U$ 1000.,32.,S.RCVB,R1    ; BYTES RECEIVED
95      DLC0U$ 1001.,32.,S.XMTB,R1          ; BYTES SENT
96      DLC0U$ 1010.,32.,S.RCVC,R1          ; DATA BLOCKS RECEIVED
97      DLC0U$ 1011.,32.,S.XMTC,R1          ; DATA BLOCKS SENT
98      DLC0U$ 1020.,8.,S.NKSW,R1,BM        ; DATA ERROR INBOUND
99      DLBM$ SE.SHC,S.DLCF,BIT0            ; NAK'S SENT DATA HEADER BLOCK CHECK
100     DLBM$ SE.SDC,S.DLCF,BIT1            ; NAK'S SENT DATA FIELD BLOCK CHECK
101     DLBM$ SE.SRR,S.DLCF,BIT2            ; NAK'S SENT REP RESPONSE
102     DLBM$ END
103     DLC0U$ 1021.,8.,S.NKRW,R1,BM        ; DATA ERRORS OUTBOUND
104     DLBM$ SE.RCH,S.DLCF,BIT0            ; NAK'S RECEIVED DATA HEADER BLOCK CHECK
105     DLBM$ SE.RDC,S.DLCF,BIT1            ; NAK'S RECEIVED DATA FIELD BLOCK CHECK
106     DLBM$ SE.RRR,S.DLCF,BIT2            ; NAK'S RECEIVED REP RESPONSE
107     DLBM$ END
108     DLC0U$ 1030.,8.,S.REPR,R1            ; REMOTE REPLY TIMEOUTS
109     DLC0U$ 1031.,8.,S.REPS,R1            ; LOCAL REPLY TIMEOUTS
110     DLC0U$ 1040.,8.,S.NKRB,R1,BM        ; REMOTE BUFFER ERRORS
111     DLBM$ SE.RBU,S.DLCF,BIT0            ; NAK'S RECEIVED BUFFER UNAVAILABLE
112     DLBM$ SE.RBS,S.DLCF,BIT1            ; NAK'S RECEIVED BUFFER TOO SMALL
113     DLBM$ END
114     DLC0U$ 1041.,8.,S.NKSB,R1,BM        ; LOCAL BUFFER ERRORS
115     DLBM$ SE.SBU,S.DLCF,BIT0            ; NAK'S SENT BUFFER UNAVAILABLE
116     DLBM$ SE.SBS,S.DLCF,BIT1            ; NAK'S SENT BUFFER TOO SMALL
117     DLBM$ END
118     DLC0U$ 1050.,16.,S.SELC,R1           ; SELECTION INTERVALS ELAPSED
119     DLC0U$ 1051.,8.,S.SELT,R1,BM        ; SELECTION TIMEOUTS
120     DLBM$ SE.NRS,S.DLCF,BIT0            ; NO REPLY TO SELECT
121     DLBM$ SE.IRS,S.DLCF,BIT1            ; INCOMPLETE REPLY TO SELECT
122     DLBM$ END
123
124     DCPLN1: DLC0U$ 1100.,8.,L.NRSE,R0,BM  ; REMOTE PROCESS ERRORS
125     DLBM$ LE.NRO,L.SCFW,BIT0            ; NAK'S SENT RECEIVE OVERRUN
126     DLBM$ LE.NSH,L.SCFW,BIT1            ; NAK'S SENT HEADER FORMAT ERROR
127     DLBM$ LE.SAE,L.SCFW,BIT2            ; SELECTION ADDRESS ERRORS
128     DLBM$ LE.STT,L.SCFW,BIT3            ; STREAMING TRIBUTARIES
129     DLBM$ END
130     DLC0U$ 1101.,8.,L.NLSE,R0,BM        ; LOCAL PROCESS ERRORS
131     DLBM$ LE.NSO,L.SCFW,BIT0            ; NAK'S SENT RECEIVE OVERRUN
132     DLBM$ LE.RCO,L.SCFW,BIT1            ; RECEIVE OVERRUNS NAK NOT SENT
133     DLBM$ LE.XTU,L.SCFW,BIT2            ; TRANSMIT UNDERRUNS
134     DLBM$ LE.NRH,L.SCFW,BIT3            ; NAK'S RECEIVED HEADER FORMAT ERROR
135     DLBM$ END
136     DLC0U$ END

```

DEALUN - DEASSIGN TEMPORARY LUN MACRO V05.03b Saturday 29-Jun-85 J 10 17:42 Page 5  
MACRO LIBRARY CALLS

```
56  
57  
58  
59  
60  
61  
62  
63 000000  
64
```

```
      .SBTTL  MACRO LIBRARY CALLS  
      :  
      : LIBRARY CALLS  
      :  
      .MCALL SAVMAP,RESMAP,MAP  
      .IF    NDF,ISSAS  
      .MCALL HDRDF$  
      HDRDF$ ; DEFINE TASK HEADER OFFSETS  
      .ENDC
```

```

126 000124 160116 SUB R1,(SP) ;; allocate space at end of buffer
127 000126 011600 MOV (SP),R0 ;; set up for copy
128 000130 CALL COPY ;; copy data to end of message buffer
129 000134 012600 MOV (SP)+,R0 ;; Get address of line data
130 000136 010001 MOV R0,R1 ;;
131 000140 066501 000030 ADD C,CNT2(R5),R1 ;; Get address of station data
132 000144 067702 000000G ADD @PDVTA,R2 ;; Point to PDV address ; RJK01
133 000150 011202 MOV (R2),R2 ;; Point to process PDV
134 000152 MAP Z,DSP(R2) ;; Map to format tables
135
136 000160 116502 000022 MOVB C,FLG1(R5),R2 ;; Retrieve entity type
137 000164 006302 ASL R2 ;; Make entity type a doubleword index
138 000166 066502 000032 ADD C,FLG2(R5),R2 ;; Point into line table extension
139 000172 020227 120000 CMP R2,#120000 ;; APR 5 address ?
140 000176 103404 BLO 20$ ;; if L0, no - its in DSR
141 000200 BIAS R2 ;; bias address for APR 6
142
143 000210 20$: SAVRG <R5> ;; Save CCB address
144 000212 012205 MOV (R2)+,R5 ;; Point to line formatting table
145 000214 BIAS R5 ;; use APR 6 bias
146 000224 012246 MOV (R2)+,-(SP) ;; Point to station formatting table
147 000226 001404 BEQ 25$ ;; If EQ, no station table
148 000230 BIAS (SP) ;; Else use APR 6 bias
149
150 ;; Set up R2 so that the proper counters are returned:
151 ;; 0 = Point-to-Point
152 ;; -1 = Multipoint controller counters
153 ;; +1 = Multipoint trib counters
154
155 000240 005002 25$: CLR R2 ;; Assume return all counters (pt to pt)
156 000242 132764 000010 000041 BITB #LP$MPT,L$PFG(R4) ;; Is this a multipoint line ?
157 000250 001406 BEQ 30$ ;; If EQ, no - return all
158 000252 005302 000002 000041 DEC R2 ;; Assume only return controller counters
159 000254 132764 BITB #LP$TRB,L$PFG(R4) ;; Was a tributary specified ?
160 000262 001401 BEQ 30$ ;; If EQ, no
161 000264 122222 CMPB (R2)+,(R2)+ ;; Else, return station counters only
162 000266 SAVRG <R2> ;; Save line-type indicator
163 000270 CALL FMTCOU ;; Get the time counter
164 000274 RESRG <R2> ;; Restore base counter indicator
165 000276 012605 MOV (SP)+,R5 ;; Pick up station format table address
166 000300 001402 BEQ 40$ ;; If EQ, yes we have no stations
167 000302 CALL FMTCOU ;; else format the counters
168 000306 RESRG <R5> ;; Restore CCB address
169 000310 RESMAP ;; Restore APR 6
170
171 000314 032764 000010 000064 45$: BIT #LF$VR2,L$FLG(R4) ;; Speaking NICE V2.0 ?
172 000322 001003 BNE 50$ ;; if NE, yes - include XPT counters
173
174 .IIF NE CM,LIN .ERROR ;; Value error
175
176 000324 105765 000022 TSTB C,FLG1(R5) ;; else, is entity = LINE ?
177 000330 001402 BEQ 55$ ;; if EQ, yes
178
179 000332 50$: CALL GETXPT ;; else get transport counters
180
181 000336 010366 000000G 55$: MOV R3,R3(SP) ;; Update user state R3
182 000342 000421 BR 65$ ;; Return buffer

```

DLCCOU CREATED BY MACRO ON 29-JUN-85 AT 12:22 PAGE 4 J 12  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL    | VALUE      | REFERENCES                                         |
|-----------|------------|----------------------------------------------------|
| \$\$\$MGE | = 000000   | 8-141 8-145 8-148 10-301                           |
| NMCRS     | = ***** GX | 9-274                                              |
| \$\$\$VCT | = *****    | 8-120 8-134 8-169 8-193 9-279 10-297 10-299 10-305 |
| PDVTA     | = ***** GX | 8-132 9-232                                        |
| RQSTCO    | = 000416 R | 8-97 #9-218                                        |
| \$\$\$RO  | = ***** GX | *8-192 *9-278 *11-354                              |
| \$\$\$R3  | = ***** GX | *8-181 11-338                                      |
| \$\$\$R5  | = ***** GX | *9-228                                             |
| \$\$\$MPL | = *****    | 9-240                                              |
| \$\$\$11D | = *****    | 5-55                                               |
| \$\$\$11M | = 000000   | 5-55 8-141 8-145 8-148 10-301                      |
| \$\$\$11S | = *****    | 5-55                                               |
| SF.ACT    | = 000200   | #5-57                                              |
| SF.ENA    | = 000100   | #5-57                                              |
| SF.LPB    | = 000004   | #5-57                                              |
| SF.MFL    | = 000040   | #5-57                                              |
| SF.PAC    | = 000020   | #5-57                                              |
| SF.REA    | = 000010   | #5-57                                              |
| SF.SER    | = 000001   | #5-57                                              |
| SF.SVC    | = 000002   | #5-57                                              |
| SF.UNL    | = 000040   | #5-57                                              |
| S.COST    | = 000001   | #5-57                                              |
| S.FLG     | = 000000   | #5-57                                              |
| S.LEN     | = 000004   | #5-57                                              |
| S.NMST    | = 000002   | #5-57                                              |
| S.OWNR    | = 000003   | #5-57                                              |
| TKTCB     | = ***** GX | 9-271                                              |
| T.NAM     | = ***** GX | 9-272 9-273                                        |
| XPTCOU    | = ***** GX | 11-330 11-349                                      |
| \$\$\$MCB | = *****    | 5-55                                               |
| ZF.COUI   | = 001000   | #5-55                                              |
| ZF.DDM    | = 000001   | #5-55                                              |
| ZF.DIA    | = 004000   | #5-55                                              |
| ZF.DLC    | = 000002   | #5-55                                              |
| ZF.DVP    | = 100000   | #5-55                                              |
| ZF.INI    | = 040000   | #5-55                                              |
| ZF.KMX    | = 000020   | #5-55                                              |
| ZF.LLC    | = 000004   | #5-55                                              |
| ZF.LMC    | = 000100   | #5-55                                              |
| ZF.MAN    | = 020000   | #5-55                                              |
| ZF.MFL    | = 000010   | #5-55                                              |
| ZF.MTM    | = 000400   | #5-55                                              |
| ZF.MUX    | = 000040   | #5-55                                              |
| ZF.PSE    | = 002000   | #5-55                                              |
| ZF.SLI    | = 010000   | #5-55                                              |
| ZF.TIM    | = 000200   | #5-55                                              |
| ZF.X3P    | = 000000   | #5-55                                              |
| ZS.ASN    | = 100000   | #5-55                                              |
| ZS.BSY    | = 140000   | #5-55                                              |
| Z.AVL     | = 000014   | #5-55                                              |
| Z.DAT     | = 000016   | #5-55                                              |
| Z.DSP     | = 000000   | #5-55 5-55 8-134                                   |

```

127      .SBTTL FNDDLML - FIND THE DLM LINE TABLE FOR A CIRCUIT
128
129      **FNDDLML-FIND THE DLM LINE TABLE FOR A CIRCUIT
130
131      THIS ROUTINE IS CALLED TO FIND THE DLM LINE TABLE FOR A CIRCUIT.
132
133      INPUTS:
134      R4 = ADDRESS OF CONTEXT AREA WITH:
135      L$SLT(R4) = ADDRESS OF SLT FOR LINE
136      L$TRB(R4) = LOGICAL TRIBUTARY NUMBER FOR LINE
137
138      OUTPUTS:
139      IF CC, DLM IS THE DLC FOR THE LINE, AND THE TRIBUTARY NUMBER
140      WAS MATCHED IN THE POLLING LIST.
141      R0 = ADDRESS OF DLM LINE TABLE
142      R1 = ADDRESS OF TRIBUTARY ENTRY IN POLLING LIST
143      ELSE, ERROR
144
145      REGISTERS:
146      R4, R5 ARE PRESERVED
147
148      -
149
150      FNDDLML:
151      000062      016400      000042      000000      MOV     L$SLT(R4),R0      ;; GET THE SLT ADDRESS
152      000066      032760      040000      000000      BIT     #LF.RDY,L.FLG(R0)      ;; IS THE LINE LOADED ?
153      000074      001446      015355      5$:      BEQ     30$      ;; IF EQ, NO - RETURN WITH ERROR
154      000076      012702      015355      5$:      MOV     #RDLM,R2      ;; SET DLM'S PROCESS NAME
155      000102      103441      000003      5$:      CALL    @PDVID      ;; GET IT'S PDV INDEX      ; RJK01
156      000110      120260      000003      5$:      BCS     30$      ;; IF CS, NOT THERE !      ; **1
157      000114      001036      000003      5$:      CMPB    R2,L.DLC(R0)      ;; IS THIS A DDCLMP LINE ?
158      000116      000000      000010      5$:      BNE     30$      ;; IF NE, NO - CAN'T DO IT
159      000124      016000      000010      5$:      MAP     L.DLM(R0)      ;; MAP TO THE LINE TABLE
160      000124      016000      000010      5$:      MOV     L.DLS(R0),R0      ;; GET LINE TABLE VIRT ADDRESS
161
162      000130      020027      120000      7$:      .IF DF M$MGE      ;; MAPPED THROUGH APR 5 ?
163      000134      103404      120000      7$:      CMP     R0,#120000      ;; IF LO, NO
164      000136      000000      120000      7$:      BLO     7$      ;; FORCE APR 6 MAPPING (APR 2 FOR IAS)
165      000146      000000      120000      7$:      BIAS    R0      ;;
166      000146      000000      120000      7$:      .ENDC    ; M$MGE
167
168      000146      010002      000006      10$:      MOV     R0,R2      ;;
169      000150      062702      000006      10$:      ADD     #D$TRHD,R2      ;; POINT TO THE POLLING LISTHEAD
170      000154      011201      000006      10$:      MOV     (R2),R1      ;; GET THE NEXT ENTRY
171      000156      001415      000006      10$:      BEQ     30$      ;; IF EQ, NOT HERE - ??
172
173      000160      020127      120000      15$:      .IF DF M$MGE      ;; MAPPED THROUGH APR 5 ?
174      000164      103404      120000      15$:      CMP     R1,#120000      ;; IF LO, NO
175      000166      000000      120000      15$:      BLO     15$      ;; FORCE APR 6 MAPPING (APR 2 FOR IAS)
176      000176      000000      120000      15$:      BIAS    R1      ;;
177      000176      000000      120000      15$:      .ENDC    ; M$MGE
178
179      000176      126164      000002      000040      20$:      CMPB    Q$STN(R1),L$TRB(R4)      ;; IS THIS THE TRIBUTARY ?
180      000204      001404      000002      000040      20$:      BEQ     40$      ;; IF EQ, YES
181      000206      010102      000002      000040      20$:      MOV     R1,R2      ;; ELSE, CONTINUE SCAN
182      000210      000761      000002      000040      20$:      BR      10$      ;;
183      000212      000261      000002      000040      30$:      SEC     50$      ;; SET ERROR
184      000214      000401      000002      000040      30$:      BR      50$      ;; AND RETURN

```

.IIF NDF M\$SACP .TITLE DLX010 - ISSUE I/O TO DLX  
.IIF DF M\$SACP .TITLE DLXAST - ISSUE I/O TO DLX AND WAIT FOR AST  
.IDENT /V05.00/  
.NLIST BEX

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#### MODULE DESCRIPTION:

NETWORK MANAGEMENT - ISSUE I/O REQUESTS TO NX: (DLX)

DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

#### IDENT HISTORY:

- 1.00 24-MAR-81  
CREATED FROM LICHOP, CONDITIONALIZED TO FORK WHEN RUNNING IN  
THE NETWORK MANAGEMENT ACP
- 2.00 16-APR-82  
DECNET-11M V3.1  
DECNET-11M-PLUS V1.1
- 4.00 07-NOV-83  
DECNET-11M V4.0  
DECNET-11M-PLUS V2.0
- 5.00 22-JUL-85  
DECnet-11M/S V4.2  
DECnet-11M-PLUS V3.0  
DECnet-Micro/RSX V1.0

DLXQIO      CREATED BY    MACRO    ON 29-JUN-85 AT 12:23      PAGE 2      J 15

SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE    | REFERENCES                          |
|---------|----------|-------------------------------------|
| LS\$MRT | = 000020 | #6-75                               |
| LS\$MWN | = 000040 | #6-75                               |
| LS\$MXB | = 001000 | #6-75                               |
| LS\$MXR | = 000020 | #6-75      6-75      6-75      6-75 |
| LS\$MXW | = 000040 | #6-75      6-75      6-75      6-75 |
| LS\$NMT | = 020000 | #6-75                               |
| LS\$NOR | = 100000 | #6-75                               |
| LS\$NTI | = 000200 | #6-75                               |
| LS\$NTL | = 000001 | #6-75                               |
| LS\$NUM | = 000100 | #6-75      6-75                     |
| LS\$OWN | = 000010 | #6-75                               |
| LS\$PLT | = 004000 | #6-75                               |
| LS\$PRO | = 010000 | #6-75                               |
| LS\$PVC | = 020053 | #6-75                               |
| LS\$RET | = 000200 | #6-75      6-75      6-75           |
| LS\$SER | = 100000 | #6-75                               |
| LS\$STA | = 000002 | #6-75                               |
| LS\$SVC | = 000362 | #6-75                               |
| LS\$TAD | = 000020 | #6-75                               |
| LS\$TH1 | = 000100 | #6-75                               |
| LS\$TH2 | = 000200 | #6-75                               |
| LS\$TH3 | = 000400 | #6-75                               |
| LS\$XMT | = 040000 | #6-75                               |
| L\$ACT  | 000104   | #6-75                               |
| L\$BBT  | 000114   | #6-75                               |
| L\$BLK  | 000262   | #6-75                               |
| L\$BSA  | 000122   | #6-75                               |
| L\$BSD  | 000123   | #6-75                               |
| L\$BSI  | 000124   | #6-75                               |
| L\$BUF  | 000060   | #6-75                               |
| L\$CHN  | 000054   | #6-75                               |
| L\$CMB  | 000234   | #6-75                               |
| L\$COS  | 000101   | #6-75                               |
| L\$CTB  | 000053   | #6-75                               |
| L\$CTL  | 000002   | #6-75                               |
| L\$CUS  | 000260   | #6-75                               |
| L\$DDM  | 000000   | #6-75                               |
| L\$DDT  | 000106   | #6-75                               |
| L\$DEA  | 000105   | #6-75                               |
| L\$DLT  | 000110   | #6-75                               |
| L\$DTE  | 000240   | #6-75                               |
| L\$DTEL | 000236   | #6-75                               |
| L\$DTEP | 000250   | #6-75                               |
| L\$FLG  | 000064   | #6-75                               |
| L\$FLX  | 000076   | #6-75                               |
| L\$FL1  | 000066   | #6-75                               |
| L\$FL2  | 000070   | #6-75                               |
| L\$HBT  | 000254   | #6-75                               |
| L\$HTM  | 000226   | #6-75                               |
| L\$INA  | 000125   | #6-75                               |
| L\$IND  | 000126   | #6-75                               |
| L\$INI  | 000127   | #6-75                               |

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 Page 9  
DLXQIO - ISSUE I/O REQUEST TO NX:

```

91                                     .SBTTL DLXQIO - ISSUE I/O REQUEST TO NX:
92
93                                     ;+
94                                     **--DLXQIO-ISSUE I/O REQUEST TO DLX
95                                     ;
96                                     THIS ROUTINE IS CALLED TO ISSUE A DLX REQUEST.
97                                     ;
98                                     INPUTS:
99                                     R0 = FUNCTION CODE
100                                    R1 = P1 (OPTIONAL)
101                                    R4 = ADDRESS OF CONTEXT BLOCK
102                                     ;
103                                     OUTPUTS:
104                                     IF CC, OPERATION SUCCEEDED
105                                     ELSE, OPERATION FAILED, ERROR CODE FILLED INTO DLXMSG STRING
106                                     ;
107                                     REGISTERS:
108                                     NO REGISTERS MODIFIED
109                                     ;
110                                     DLXQIO::
111                                     CALL    $$SAVAL                ; SAVE ALL REGISTERS
112                                     ;
113                                     ; FORMAT LINE-ID STRING FOR DLX
114                                     ;
115                                     .IF NDF M$$ACP
116                                     .MOV     R4,R3                ; COPY THE CONTEXT AREA POINTER
117                                     .ADD     #L$SCR,R3           ; POINT TO THE SCRATCH BUFFER
118                                     .IFF      ;NDF M$$ACP
119                                     .MOV     CURCIX,R3           ; COPY THE CONTEXT AREA POINTER
120                                     .MOV     R3,R5                ;
121                                     .ADD     #C$LOC,R3           ; POINT TO THE SCRATCH BUFFER
122                                     .ADD     #C$STAT,R5           ; ... AND THE I/O STATUS BLOCK
123                                     .IFTF    ;NDF M$$ACP
124                                     .SAVRG   <R3>                ; SAVE R3
125                                     .IF DF   S$$BAS ! R$$RTR
126                                     .CALL    FMTLN2              ; FORMAT PHYSICAL LINE-ID
127                                     .IFF
128                                     .CALL    FMTLIN               ; FORMAT A LINE-ID STRING
129                                     .ENDC    ; DF S$$BAS ! R$$RTR
130                                     .RESRG   <R3>                ; RESTORE LINE-ID POINTER
131                                     .MOVB    (R3)+,R2            ; GET STRING LENGTH
132                                     ;
133                                     ; ISSUE I/O
134                                     ;
135                                     .IFT     ;NDF M$$ACP
136                                     ;
137                                     ;
138                                     ;
139                                     ;
140                                     ;
141                                     ;
142                                     ;
143                                     ;
144                                     ;
145                                     ;
146                                     ;
147                                     ;

```



|         |        |         |        |          |        |         |        |         |        |
|---------|--------|---------|--------|----------|--------|---------|--------|---------|--------|
| MD\$DV  | 000026 | ME.BLO  | 177744 | ML\$MON  | 000003 | MP\$BMX | 002176 | MP\$ELT | 000157 |
| MD\$DZ  | 000030 | ME.CON  | 177753 | ML\$SSY  | 000002 | MP\$BNP | 006370 | MP\$ETY | 001605 |
| MD\$FUL | 000000 | ME.CST  | 177765 | ML\$STOP | 000001 | MP\$BRT | 001070 | MP\$EVE | 000311 |
| MD\$HAL | 000001 | ME.DIS  | 177755 | ML\$UNL  | 000377 | MP\$BSA | 002176 | MP\$FNC | 001752 |
| MD\$HEL | 000002 | ME.DON  | 177600 | MOSACC   | 000200 | MP\$BSD | 002703 | MP\$GDT | 002222 |
| MD\$KCP | 000013 | ME.FCO  | 177762 | MOSADD   | 000002 | MP\$BSI | 002200 | MP\$GNM | 002223 |
| MD\$KDP | 000034 | ME.FIO  | 177756 | MOSALA   | 000004 | MP\$BSP | 000331 | MP\$GRP | 002115 |
| MD\$KDZ | 000036 | ME.FOP  | 177763 | MOSALI   | 000000 | MP\$BUF | 000170 | MP\$GRP | 000541 |
| MD\$KL  | 000040 | ME.FOR  | 177776 | MOSCHA   | 000040 | MP\$BUP | 076324 | MP\$GTY | 002224 |
| MD\$KMX | 000054 | ME.FUN  | 177777 | MOSCIR   | 000003 | MP\$BUS | 001643 | MP\$HAD | 001757 |
| MD\$KMY | 000052 | ME.GRO  | 177745 | MOSCLE   | 000100 | MP\$CAC | 001750 | MP\$HBT | 002142 |
| MD\$LEN | 000050 | ME.HAR  | 177750 | MOSCOU   | 000060 | MP\$CAS | 001762 | MP\$HDD | 000162 |
| MD\$PCL | 000011 | ME.IID  | 177767 | MOSDAC   | 000000 | MP\$CAT | 002210 | MP\$HTM | 001612 |
| MD\$QNA | 000005 | ME.LCO  | 177766 | MOSDEF   | 000000 | MP\$CCS | 004406 | MP\$HWA | 002210 |
| MD\$UNA | 000001 | ME.LPR  | 177757 | MOSDPR   | 000000 | MP\$CHN | 002141 | MP\$HAT | 001322 |
| MD\$UIT | 000002 | ME.MPR  | 177773 | MOSENT   | 000017 | MP\$CIR | 000144 | MP\$IDE | 000144 |
| MD.ABO  | 000017 | ME.MVE  | 177771 | MOSSEVE  | 000100 | MP\$CLK | 002131 | MP\$IDP | 006327 |
| MD.ACC  | 000010 | ME.OPE  | 177747 | MOSINF   | 000160 | MP\$CLN | 002726 | MP\$IHO | 000215 |
| MD.AOB  | 000016 | ME.PLO  | 177751 | MOSINS   | 000002 | MP\$CLT | 002211 | MP\$JNA | 002177 |
| MD.BOB  | 000011 | ME.PMI  | 177743 | MOSLIN   | 000001 | MP\$CMB | 002142 | MP\$IND | 002204 |
| MD.DIA  | 000007 | ME.PNA  | 177752 | MOSLOG   | 000001 | MP\$CMK | 000537 | MP\$INI | 002201 |
| MD.DOB  | 000015 | ME.PRI  | 177775 | MOSMIR   | 000031 | MP\$CMX | 002153 | MP\$ITI | 000776 |
| MD.DUM  | 000002 | ME.PTY  | 177772 | MOSNAM   | 000001 | MP\$CND | 000310 | MP\$JAA | 000231 |
| MD.FAI  | 000014 | ME.PVA  | 177760 | MOSNIC   | 000023 | MP\$CNU | 001753 | MP\$JAN | 000234 |
| MD.FNA  | 000001 | ME.RES  | 177761 | MOSNOD   | 000000 | MP\$COB | 000311 | MP\$JAR | 000202 |
| MD.FOB  | 000006 | ME.ROO  | 177754 | MOSOFF   | 000001 | MP\$CON | 002126 | MP\$JAS | 000012 |
| MD.LQA  | 000001 | ME.SIZ  | 177774 | MOSON    | 000000 | MP\$COS | 001604 | MP\$JBS | 000203 |
| MD.LSH  | 000020 | ME.SYS  | 177746 | MOSOPT   | 000001 | MP\$CPF | 000230 | MP\$JCO | 000226 |
| MD.NOB  | 000012 | ME.UCO  | 177770 | MOSPER   | 000200 | MP\$CPL | 000232 | MP\$JCT | 000156 |
| MD.NON  | 177777 | MF\$ACT | 177776 | MOSPRO   | 000002 | MP\$CPT | 000226 | MP\$JHL | 000232 |
| MD.PER  | 000000 | MF\$ADD | 000000 | MOSPRS   | 000001 | MP\$CPU | 000161 | MP\$JLE | 000227 |
| MD.RES  | 000004 | MF\$ADJ | 177774 | MOSREA   | 000200 | MP\$CSZ | 001755 | MP\$JLO | 004432 |
| MD.ROB  | 000005 | MF\$ALL | 177775 | MOSSET   | 000000 | MP\$CUS | 002127 | MP\$JMB | 002152 |
| MD.RSH  | 000013 | MF\$BYE | 000300 | MOSSTA   | 000020 | MP\$CVA | 000540 | MP\$JMX | 002200 |
| MD.SDU  | 000005 | MF\$CHA | 000023 | MOSSUM   | 000000 | MP\$DAL | 002570 | MP\$JNA | 000144 |
| MD.SLO  | 000003 | MF\$DUM | 000020 | MOSTSK   | 000000 | MP\$DCO | 001464 | MP\$JNO | 000233 |
| MD.SNA  | 000000 | MF\$EVT | 000001 | MOSVOL   | 000000 | MP\$DDT | 002177 | MP\$JOA | 000170 |
| MD.TLO  | 000004 | MF\$FUP | 000264 | MOSZER   | 000000 | MP\$DEL | 001131 | MP\$JOG | 004514 |
| MD.UNA  | 000002 | MF\$KNO | 177777 | MP\$ACB  | 000012 | MP\$DES | 000156 | MP\$JOD | 000620 |
| MD.UNR  | 000003 | MF\$LOA | 000017 | MP\$ACC  | 000514 | MP\$DEV | 002114 | MP\$JTM | 001613 |
| MD.UOB  | 000007 | MF\$LOO | 177775 | MP\$ACT  | 004526 | MP\$DFA | 001320 | MP\$JTY | 004533 |
| MD.VOL  | 000006 | MF\$REA | 000024 | MP\$ADD  | 000766 | MP\$DHO | 001465 | MP\$JW1 | 000230 |
| ME\$ALI | 000010 | MF\$SIG | 177773 | MP\$ADJ  | 001440 | MP\$DIA | 000173 | MP\$JAC | 004420 |
| ME\$AL2 | 000003 | MF\$SPF | 000302 | MP\$ADP  | 006325 | MP\$DLB | 002571 | MP\$JAD | 001630 |
| ME\$ARE | 000005 | MF\$SSY | 000026 | MP\$ADS  | 004406 | MP\$DLG | 004521 | MP\$JAP | 006323 |
| ME\$CIR | 000003 | MF\$TES | 000022 | MP\$ALB  | 000036 | MP\$DLI | 001466 | MP\$JAR | 001637 |
| ME\$EXA | 000000 | MF\$TRA | 000301 | MP\$AMC  | 001640 | MP\$DLT | 002200 | MP\$JAV | 006321 |
| ME\$EXE | 000200 | MF\$TRI | 000021 | MP\$AMH  | 001641 | MP\$DRO | 001441 | MP\$JBN | 001636 |
| ME\$LIN | 000001 | MF\$ZER | 000025 | MP\$ANB  | 004420 | MP\$DST | 000454 | MP\$JBR | 001637 |
| ME\$LOG | 000002 | ML\$ALL | 100000 | MP\$ASB  | 000024 | MP\$DTE | 002140 | MP\$JBU | 001642 |
| ME\$MOD | 000004 | ML\$CLS | 000000 | MP\$ASC  | 004432 | MP\$DTY | 001452 | MP\$JCB | 000156 |
| ME\$NOD | 000000 | ML\$CON | 000001 | MP\$AUS  | 000512 | MP\$DUA | 000207 | MP\$JCO | 001632 |
| ME\$NON | 177777 | ML\$EXT | 000001 | MP\$BBT  | 002165 | MP\$DUC | 000210 | MP\$JDE | 004421 |
| ME\$OBJ | 000007 | ML\$FIL | 000002 | MP\$BDF  | 002164 | MP\$DUM | 000202 | MP\$JHO | 001633 |
| ME\$OB2 | 000004 | ML\$FIR | 000000 | MP\$BFQ  | 002121 | MP\$DUP | 002127 | MP\$JLB | 000202 |
| ME\$PRO | 000005 | ML\$INT | 000000 | MP\$BLK  | 001616 | MP\$DVC | 002114 | MP\$JLK | 001306 |
| ME\$SYS | 000006 | ML\$KNO | 140300 | MP\$BLD  | 001452 | MP\$DWE | 001321 | MP\$JLN | 001631 |

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```
.SBTTL CIREST - Read Line status
+
***CIREST-READ A LINE STATUS
THIS ROUTINE IS CALLED TO RETURN STATUS INFORMATION ABOUT A LINE.
PARAMETERS RETURNED INCLUDE STATE, SUB-STATE, LOOPBACK NAME, AND
ADJACENT NAME.
INPUTS:
R3 = ADDRESS OF NEXT FREE BYTE IN OUTPUT BUFFER
R4 = ADDRESS OF CONTEXT AREA
OUTPUTS:
R3 = ADDRESS OF NEXT FREE BYTE IN OUTPUT BUFFER
REGISTERS:
R4 IS PRESERVED
-
-IF DF R$$11S
.PSECT NIXCOD ; FORCE CODE TO APR6 FOR 11S
.ENDC

CIREST::
MOV L$SLT(R4),R0 ; GET THE SLT ADDRESS
MOV L$TPT(R4),R1 ; POINT TO THE TRIB FLAGS
BIT #LF$SEG,L$FLG(R4) ; partial response in progress ?
BEQ 10$ ; if EQ, no
JMP 70$ ; if NE, pick up where we left off
10$: .IF NDF R$$11S & R$$PRO ; IS THIS A PSI CIRCUIT?
CMP R1,#-1 ; BR IF NO
BNE 20$ ; BR IF NO
CALLR PSICIR ; FORMAT PVC INFORMATION
.ENDC

; ISOLATE AND RETURN THE LINE STATE
20$: JSR R5,SETPAR ; RETURN STATE PARAMETER TYPE
.WORD MP$STA ; ONE CODED BYTE
.WORD MT$COD!1 ; IS THE LINE CLEARED ?
BIT #LF.RDY,L.FLG(R0) ; IF NE, NO - RETURN STATE
BNE 25$ ; ELSE, RETURN STATE = CLEARED
MOVBL #MS$CLE,(R3)+ ; AND SKIP SUB-STATE
BR 50$ ; GET THE MANAGEMENT STATE
25$: MOVBL L.NMST(R0),R2 ; MULTIPOINT ?
TSTB L.NSTA(R0) ; IF EQ, NO
BEQ 30$ ; ELSE GET TRIB STATE
MOVBL S.NMST(R1),R2 ; COPY STATE/SUB-STATE
30$: MOVBL R2,R1 ; ISOLATE STATE BITS
BIC #^C17,R1 ; ISOLATE SUB-STATE BITS
BIC R1,R2 ; GET SUB-STATE INTO LOW BITS
ASR R2 ; ...
ASR R2 ; ...
ASR R2 ; ...
ASR R2 ; ...
MOVBL STATBL(R1),(R3)+ ; MAP INTO CORRECT NICE PROTOCOL STATE

; CONDITIONALLY RETURN THE LINE SUB-STATE (BASED ON STATE AND SUB-STATE)
```

|          |        |         |        |          |        |         |        |         |        |
|----------|--------|---------|--------|----------|--------|---------|--------|---------|--------|
| MP\$CPF  | 000230 | MP\$LCO | 000226 | MP\$NUM  | 001642 | MP\$SIN | 000310 | MS\$LOA | 000003 |
| MP\$CPL  | 000232 | MP\$LCT | 000156 | MP\$NVE  | 001274 | MP\$SLI | 000156 | MS\$LOO | 000002 |
| MP\$CPT  | 000226 | MP\$LHL | 000232 | MP\$NXN= | 001476 | MP\$SLO | 000171 | MS\$OFF | 000001 |
| MP\$CPU  | 000161 | MP\$LLE | 000227 | MP\$OAC  | 000632 | MP\$SMX | 002202 | MS\$ON  | 000000 |
| MP\$CSZ  | 001755 | MP\$LLO | 004432 | MP\$OAN  | 000620 | MP\$SND | 000500 | MS\$PRO | 000006 |
| MP\$CUS  | 002127 | MP\$LMB | 002152 | MP\$OCO  | 000776 | MP\$SNP | 006332 | MS\$REA | 000004 |
| MP\$CVA  | 000540 | MP\$LMX | 002200 | MP\$OHO  | 000214 | MP\$SNU | 000542 | MS\$REF | 000001 |
| MP\$DAL  | 002570 | MP\$LNA | 000144 | MP\$ONA  | 000764 | MP\$SOB | 000524 | MS\$RES | 000003 |
| MP\$DCO= | 001464 | MP\$LNO | 000233 | MP\$ONR  | 002114 | MP\$SPA | 000157 | MS\$RST | 000001 |
| MP\$DDT  | 002177 | MP\$LOA | 000170 | MP\$OQL  | 001453 | MP\$SPR | 000536 | MS\$RSX | 000002 |
| MP\$DEL  | 001131 | MP\$LOG | 004514 | MP\$OTI  | 000777 | MP\$SPS | 000513 | MS\$RT  | 000005 |
| MP\$DES  | 000156 | MP\$LOO | 000620 | MP\$OTY  | 001022 | MP\$STA | 000000 | MS\$SER | 000002 |
| MP\$DEV  | 002114 | MP\$LTM | 001613 | MP\$OUS  | 000777 | MP\$STI | 002140 | MS\$SHU | 000002 |
| MP\$DFA  | 001320 | MP\$LTY | 004533 | MP\$OVE  | 001010 | MP\$STT | 002201 | MS\$SRV | 000007 |
| MP\$DHO= | 001465 | MP\$LWI | 000230 | MP\$OWN  | 004374 | MP\$STY | 000175 | MS\$STA | 000000 |
| MP\$DIA  | 000173 | MP\$MAC | 004420 | MP\$PAR  | 000036 | MP\$SUB | 000001 | MS\$SYN | 000012 |
| MP\$DLB  | 002571 | MP\$MAD | 001630 | MP\$PAS  | 000513 | MP\$SUR | 000156 | MS\$TER | 000001 |
| MP\$DLG  | 004521 | MP\$MAP | 006323 | MP\$PCH  | 002152 | MP\$SUS | 000512 | MS\$TOP | 000003 |
| MP\$DLI= | 001466 | MP\$MAR | 001635 | MP\$PCO  | 000024 | MP\$SVR | 000163 | MS\$TRI | 000005 |
| MP\$DLT  | 002200 | MP\$MAV | 006321 | MP\$PCT  | 000144 | MP\$SWI | 002260 | MS\$UNR | 000005 |
| MP\$DRO  | 001441 | MP\$MBN | 001636 | MP\$PDT  | 002114 | MP\$SYP | 002424 | MS\$VMS | 000004 |
| MP\$DST  | 000454 | MP\$MBR | 001637 | MP\$PHA  | 000170 | MP\$TFL | 000156 | MS.DON  | 177600 |
| MP\$DTE  | 002140 | MP\$MBU | 001642 | MP\$PHY  | 000012 | MP\$TH1 | 002206 | MS.MOR  | 000002 |
| MP\$DTY= | 001452 | MP\$MCB | 000156 | MP\$PLI  | 000025 | MP\$TH2 | 002205 | MS.PAR  | 000003 |
| MP\$DUA  | 000207 | MP\$MCO | 001632 | MP\$PLN  | 002140 | MP\$TH3 | 002202 | MS.SUC  | 000001 |
| MP\$DUC  | 000210 | MP\$MDE | 004421 | MP\$PLD  | 000012 | MP\$TLN | 000202 | MS\$AR4 | 000003 |
| MP\$DUM  | 000202 | MP\$MHO | 001633 | MP\$PMC  | 004374 | MP\$TLD | 000172 | MS\$ASC | 000100 |
| MP\$DUP  | 002127 | MP\$MLB | 000202 | MP\$PNT  | 002126 | MP\$TPA | 004375 | MS\$BIL | 000001 |
| MP\$DVC  | 002114 | MP\$MLK | 001306 | MP\$PRI  | 004411 | MP\$TRI | 002164 | MS\$BYS | 000011 |
| MP\$DWE  | 001321 | MP\$MLN | 001631 | MP\$PRD  | 002130 | MP\$TST | 000144 | MS\$CI  | 000007 |
| MP\$ELT  | 000157 | MP\$MLP | 006333 | MP\$PSS  | 001763 | MP\$TYP | 002130 | MS\$CLE | 000077 |
| MP\$ETY  | 001605 | MP\$MRB | 002171 | MP\$PST  | 001762 | MP\$UCS | 004407 | MS\$COD | 000200 |
| MP\$EVE  | 000311 | MP\$MRD | 001605 | MP\$RET  | 001631 | MP\$USR | 001750 | MS\$CON | 000001 |
| MP\$FNC  | 001752 | MP\$MRP | 006322 | MP\$RFA  | 001323 | MP\$VEC | 004410 | MS\$DMC | 000004 |
| MP\$GDT  | 002222 | MP\$MRT | 002153 | MP\$RMX  | 002201 | MP\$VER | 004406 | MS\$ETH | 000006 |
| MP\$GDM  | 002223 | MP\$MRV | 006320 | MP\$RPA  | 004374 | MP\$WDF | 002165 | MS\$HEX | 000040 |
| MP\$GRO  | 002115 | MP\$MSB | 000170 | MP\$RPR  | 001606 | MP\$WMX | 002177 | MS\$LPB | 000005 |
| MP\$GRP  | 000541 | MP\$MVE | 000145 | MP\$RRT  | 002213 | MP\$XMT | 002166 | MS\$MAX | 000037 |
| MP\$GTY  | 002224 | MP\$MVI | 001634 | MP\$RST  | 002212 | MP\$XPF | 000242 | MS\$MUL | 000100 |
| MP\$HAD  | 001757 | MP\$MVR | 001751 | MP\$RSV  | 001754 | MP\$XPL | 000244 | MS\$NLE | 000017 |
| MP\$HBT  | 002142 | MP\$MWN | 002154 | MP\$RSZ  | 001756 | MP\$XPT | 000240 | MS\$NON | 000001 |
| MP\$HDD  | 000162 | MP\$MXB | 002172 | MP\$RTI  | 001616 | MP\$XXX | 177777 | MS\$NR4 | 000005 |
| MP\$HTM  | 001612 | MP\$MXC | 000466 | MP\$RTM  | 001611 | MP\$YST | 004406 | MS\$NTY | 000060 |
| MP\$HWA  | 002210 | MP\$MXR | 001630 | MP\$RVE  | 001604 | MS\$ACT | 000001 | MS\$OCT | 000060 |
| MP\$IAT  | 001322 | MP\$MXW | 002143 | MP\$RVT  | 000156 | MS\$ADU | 000010 | MS\$PHA | 000002 |
| MP\$IDE  | 000144 | MP\$NAA | 006335 | MP\$SAC  | 000514 | MS\$ALD | 000007 | MS\$POI | 000000 |
| MP\$IDP  | 006327 | MP\$NAC | 001130 | MP\$SAD  | 000543 | MS\$ASE | 000006 | MS\$OP2 | 000010 |
| MP\$IHO  | 000215 | MP\$NAP | 006326 | MP\$SCA  | 000310 | MS\$ATR | 000011 | MS\$ROU | 000000 |
| MP\$INA  | 002177 | MP\$NCT | 000240 | MP\$SCO  | 000144 | MS\$AUT | 000000 | MS\$RO4 | 000004 |
| MP\$IND  | 002204 | MP\$NET | 002114 | MP\$SCT  | 002176 | MS\$CLE | 000003 | MS\$SEC | 000000 |
| MP\$INI  | 002201 | MP\$NLI | 000765 | MP\$SDU  | 000203 | MS\$DED | 000004 | MS\$SGD | 000020 |
| MP\$ITI  | 000776 | MP\$NNA | 000764 | MP\$SDV  | 000160 | MS\$DIE | 000003 | MS\$SYS | 000002 |
| MP\$LAA  | 00231  | MP\$NOD | 000500 | MP\$SEH  | 004401 | MS\$DUM | 000004 | MS\$TER | 000001 |
| MP\$LAN  | 000234 | MP\$NRA | 006334 | MP\$SER  | 000144 | MS\$FAI | 000013 | MS\$TRI | 000002 |
| MP\$LAR  | 000202 | MP\$NRB | 000214 | MP\$SET  | 000000 | MS\$GLD | 000000 | MS\$TYP | 007777 |
| MP\$LAS  | 000012 | MP\$NSA | 001617 | MP\$SGZ  | 001644 | MS\$HOL | 000002 | MS\$USD | 000000 |
| MP\$LBS  | 000203 | MP\$NTI | 002141 | MP\$SID  | 000176 | MS\$INA | 000002 | MS\$X25 | 000003 |

|        |                |              |                                           |
|--------|----------------|--------------|-------------------------------------------|
| 000072 | L\$PAR: .BLKW  | 1            | : CURRENT PARAMETER TYPE                  |
| 000074 | L\$LEN: .BLKB  | 1            | : Significant length of circuit name      |
| 000075 | L\$PRO: .BLKB  | 1            | : Line protocol                           |
| 000075 | L\$MTYP: .BLKB | 1            | : Network management circuit type         |
| 000076 | L\$FLX: .BLKW  | 1            | : Flags word for X.25 circuit commands    |
| 000100 | L\$STA: .BLKB  | 1            | : CIRCUIT STATE                           |
| 000101 | L\$COS: .BLKB  | 1            | : CIRCUIT COST                            |
| 000102 | L\$OWN: .BLKB  | 1            | : CIRCUIT OWNER (PDV INDEX)               |
| 000103 | L\$TAD: .BLKB  | 1            | : TRIBUTARY ADDRESS                       |
| 000104 | L\$ACT: .BLKB  | 1            | : MULTIPOINT ACTIVE RATIO                 |
| 000105 | L\$DEA: .BLKB  | 1            | : MULTIPOINT DEAD RATIO                   |
| 000106 | L\$DDT: .BLKW  | 1            | : DMP DEAD TIMER                          |
| 000110 | L\$DLT: .BLKW  | 1            | : DMP DELAY TIMER                         |
| 000112 | L\$PLT: .BLKW  | 1            | : DMP POLL TIMER                          |
| 000114 | L\$BBT: .BLKW  | 1            | : DMP BABBLE TIMER                        |
| 000116 | L\$NMT: .BLKW  | 1            | : DMP NORMAL TIMER                        |
| 000120 | L\$XMT: .BLKW  | 1            | : DMP TRANSMIT TIMER                      |
| 000122 | L\$BSA: .BLKB  | 1            | : DMP ACTIVE BASE                         |
| 000123 | L\$BSD: .BLKB  | 1            | : DMP DYING BASE                          |
| 000124 | L\$BSI: .BLKB  | 1            | : DMP INACTIVE BASE                       |
| 000125 | L\$INA: .BLKB  | 1            | : DMP ACTIVE INCREMENT                    |
| 000126 | L\$IND: .BLKB  | 1            | : DMP DYING INCREMENT                     |
| 000127 | L\$INI: .BLKB  | 1            | : DMP INACTIVE INCREMENT                  |
| 000130 | L\$TH1: .BLKB  | 1            | : DMP DEAD THRESHOLD                      |
| 000131 | L\$TH2: .BLKB  | 1            | : DMP DYING THRESHOLD                     |
| 000132 | L\$TH3: .BLKB  | 1            | : DMP INACTIVE THRESHOLD                  |
| 000133 | L\$MXB: .BLKB  | 1            | : DMP MAXIMUM BLOCKS                      |
| 000134 | L\$NLT: .BLKW  | 13.          | : NTL MESSAGE BUFFER                      |
| 000166 | L\$SCR: .BLKW  | 15.          | : SCRATCH BUFFER                          |
| 000224 | L\$LCT: .BLKW  | 1            | : COUNTER TIMER                           |
| 000226 | L\$HTM: .BLKW  | 1            | : HELLO TIMER                             |
| 000230 | L\$SER: .BLKW  | 1            | : SERVICE                                 |
| 000230 | L\$LTM: .BLKW  | 1            | : LISTEN TIMER                            |
| 000232 | L\$XCH: .BLKW  | 1            | : X25 Logical Channel Number (LCN)        |
| 000234 | L\$LMB: .BLKW  | 1            | : X25 Max Block (Line)                    |
| 000234 | L\$CMB: .BLKW  | 1            | : X25 Max Data (Circuit)                  |
| 000236 | L\$NUML: .BLKW | 1            | : DLM Number length                       |
| 000236 | L\$DTL: .BLKW  | 1            | : X25 DTE length (Circuit)                |
| 000240 | L\$NUM: .BLKW  | 1            | : DLM Number                              |
| 000240 | L\$DTE: .BLKB  | 8.           | : X25 DTE (Circuit)                       |
| 000250 | L\$DTEP: .BLKW | 1            | : X25 Pointer to DTE descriptor (Circuit) |
| 000252 | L\$MWN: .BLKB  | 1            | : X25 Max Window (Line)                   |
| 000252 | L\$MXW: .BLKB  | 1            | : X25 Max Window (Circuit)                |
| 000253 | L\$MRT: .BLKB  | 1            | : X25 Max Retransmits (Line)              |
| 000253 | L\$MXR: .BLKB  | 1            | : DLM Max Recalls (Circuit)               |
| 000254 | L\$HBT: .BLKW  | 1            | : X25 Holdback Timer (Line)               |
| 000256 | L\$NTI: .BLKW  | 1            | : X25 Retransmit Timer (Line)             |
| 000256 | L\$RET: .BLKW  | 1            | : DLM Recall Timer (Circuit)              |
| 000260 | L\$CUS: .BLKW  | 1            | : DLM Usage                               |
| 000262 | L\$BLK: .BLKW  | 1            | : DLM blocking state                      |
|        | IF DF R\$PRO   | : PRO/DECnet |                                           |
|        | L\$LTY: .BLKW  | 1            | : Loopback type                           |
|        | L\$MDT: .BLKW  | 1            | : Modem Test                              |
|        | .ENDC          | : DF R\$PRO  |                                           |
|        | .EVEN          |              |                                           |
| 000264 | L\$LEN: .BLKB  |              | : LENGTH OF CONTEXT AREA                  |
| 000000 | .PSECT         |              |                                           |

CIRMAP      CREATED BY MACRO ON 29-JUN-85 AT 12:20      PAGE 2      K 5  
 SYMBOL CROSS REFERENCE      CREF      04.00

| SYMBOL | VALUE    | REFERENCES                          |
|--------|----------|-------------------------------------|
| LPSWCN | = 000040 | #5-76      5-76                     |
| LPSWDV | = 000020 | #5-76      5-76                     |
| LPSWLD | = 000360 | #5-76                               |
| LPSWTR | = 000200 | #5-76      5-76                     |
| LPSWUN | = 000100 | #5-76      5-76                     |
| LSSACT | = 000040 | #5-76                               |
| LSSBBT | = 010000 | #5-76                               |
| LSSBLK | = 001000 | #5-76      5-76                     |
| LSSBSA | = 000001 | #5-76                               |
| LSSBSD | = 000002 | #5-76                               |
| LSSBSI | = 000004 | #5-76                               |
| LSSCHN | = 000001 | #5-76      5-76                     |
| LSSCMB | = 000002 | #5-76      5-76      5-76      5-76 |
| LSSCOS | = 000004 | #5-76                               |
| LSSCUS | = 000004 | #5-76      5-76                     |
| LSSDDT | = 001000 | #5-76                               |
| LSSDEA | = 000100 | #5-76                               |
| LSSDLM | = 001004 | #5-76                               |
| LSSDLT | = 002000 | #5-76                               |
| LSSDTE | = 000010 | #5-76      5-76                     |
| LSSHBT | = 000400 | #5-76                               |
| LSSHMT | = 010000 | #5-76                               |
| LSSINA | = 000010 | #5-76                               |
| LSSIND | = 000020 | #5-76                               |
| LSSINI | = 000040 | #5-76                               |
| LSSLCT | = 020000 | #5-76      5-76                     |
| LSSLMB | = 000002 | #5-76                               |
| LSSLOO | = 040000 | #5-76                               |
| LSSMDT | = 020000 | #5-76                               |
| LSSMRT | = 000020 | #5-76                               |
| LSSMWN | = 000040 | #5-76                               |
| LSSMXB | = 001000 | #5-76                               |
| LSSMXR | = 000020 | #5-76      5-76      5-76      5-76 |
| LSSMXW | = 000040 | #5-76      5-76      5-76           |
| LSSNMT | = 020000 | #5-76                               |
| LSSNOR | = 100000 | #5-76                               |
| LSSNTI | = 000200 | #5-76                               |
| LSSNTL | = 000001 | #5-76                               |
| LSSNUM | = 000100 | #5-76      5-76                     |
| LSSOWN | = 000010 | #5-76                               |
| LSSPLT | = 004000 | #5-76                               |
| LSSPRO | = 010000 | #5-76                               |
| LSSPVC | = 020053 | #5-76                               |
| LSSRET | = 000200 | #5-76      5-76      5-76           |
| LSSSER | = 100000 | #5-76                               |
| LSSSTA | = 000002 | #5-76                               |
| LSSSVC | = 000362 | #5-76                               |
| LSSTAD | = 000020 | #5-76                               |
| LSSTH1 | = 000100 | #5-76                               |
| LSSTH2 | = 000200 | #5-76                               |
| LSSTH3 | = 000400 | #5-76                               |
| LSSXMT | = 040000 | #5-76                               |

```

000010      LF$VR2 = 10      ; CONTROLLER COUNTERS AS WELL AS ALL
040000      LF$MLT = 40000  ; OF THE TRIBUTARY COUNTERS.
100000      LF$SEG = 100000 ; CONNECTED TO VERSION 2.0 NCP
                                ; MULTIPLE ADJACENCY FLAG
                                ; SEGMENTED RESPONSE IN PROGRESS

; PARSE FLAG DEFINITIONS (L$PFG)
;
000001      LP$UNT = 1      ; UNIT NUMBER FOUND
000002      LP$TRB = 2      ; TRIBUTARY NUMBER FOUND
000004      LP$MUX = 4      ; DEVICE IS MUX
000010      LP$MPT = 10     ; LINE IS MULTIPOINT
000020      LP$WDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      LP$WCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      LP$WUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      LP$WTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LP$WLD = LP$WDV!LP$WCN!LP$WUN!LP$WTR ; WILD CARD FIELD MASK

; FLAGS WORD BIT DEFINITIONS (L$FLG)
;
000001      LS$NTL=1        ; NTL SET FUNCTION
000002      LS$STA=2        ; SET STATE
000004      LS$COS=4        ; SET COST
000010      LS$OWN=10       ; SET OWNER
000020      LS$TAD=20       ; SET TRIBUTARY ADDRESS
000040      LS$ACT=40       ; SET MULTIPOINT ACTIVE
000100      LS$DEA=100      ; SET MULTIPOINT DEAD
000200      LS$NTL=200      ; NTL CLEAR FUNCTION
000400      LS$OWN=400      ; CLEAR OWNER
001000      LS$DDT=1000     ; SET DEAD TIMER
002000      LS$DLT=2000     ; SET DELAY TIMER
004000      LS$PLT=4000     ; SET POLL TIMER
010000      LS$BBT=10000    ; SET BABBLE TIMER
020000      LS$NMT=20000    ; SET NORMAL TIMER
040000      LS$XMT=40000    ; SET TRANSMIT TIMER
100000      LS$SER=100000   ; SET SERVICE [ENABLE/DISABLE]

; FLAGS WORD BIT DEFINITIONS (L$FL1)
;
000001      LS$BSA=1        ; SET ACTIVE BASE
000002      LS$BSD=2        ; SET DYING BASE
000004      LS$BSI=4        ; SET INACTIVE BASE
000010      LS$INA=10       ; SET ACTIVE INCREMENT
000020      LS$IND=20       ; SET DYING INCREMENT
000040      LS$INI=40       ; SET INACTIVE INCREMENT
000100      LS$TH1=100      ; SET DEAD THRESHOLD
000200      LS$TH2=200      ; SET DYING THRESHOLD
000400      LS$TH3=400      ; SET INACTIVE THRESHOLD
001000      LS$MXB=1000     ; SET MAXIMUM BLOCKS
010000      LS$HTM=10000    ; SET HELLO TIMER
020000      LS$MDT=20000    ; SET MODEM TEST
040000      LS$LOO=40000    ; SET CONTROLLER LOOPBACK
100000      LS$NOR=100000   ; SET CONTROLLER NORMAL
                                ; IF DF R$SPRO ; PRO/DECNET

; LOOPBACK TYPE WORD BIT DEFINITIONS (L$LTY)
;

```

DACOU - READ/AND OR ZERO DA COU MACRO V05.03b Saturday 29-Jun-85 12:20 <sup>K 7</sup>  
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| 8-  | 65 | DISPATCH TABLE ENTRY                 |
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SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES |        |        |        |
|---------|----------|------------|--------|--------|--------|
| L\$SYL  | 000122   | #6-62      |        |        |        |
| L\$TNM  | 000052   | #6-62      |        |        |        |
| L\$TPT  | 000050   | #6-62      |        |        |        |
| L\$TRB  | 000040   | #6-62      |        |        |        |
| L\$TSZ  | 000070   | #6-62      |        |        |        |
| L\$TYP  | 000063   | #6-62      |        |        |        |
| L\$UNT  | 000003   | #6-62      |        |        |        |
| L.COST  | 000015   | #5-57      |        |        |        |
| L.CTL   | 000012   | #5-57      |        |        |        |
| L.CVA   | 177776   | #5-57      |        |        |        |
| L.DDM   | 000002   | #5-57      |        |        |        |
| L.DDS   | 000004   | #5-57      |        |        |        |
| L.DLC   | 000003   | #5-57      |        |        |        |
| L.DLM   | 000006   | #5-57      | 10-124 |        |        |
| L.DLS   | 000010   | #5-57      | 10-125 |        |        |
| L.FLG   | 000000   | #5-57      |        |        |        |
| L.KRBA  | 000016   | #5-57      |        |        |        |
| L.LEN   | = 000022 | #5-57      |        |        |        |
| L.MPF   | 000022   | #5-57      |        |        |        |
| L.NMST  | 000020   | #5-57      |        |        |        |
| L.NSTA  | 000014   | #5-57      |        |        |        |
| L.OWNR  | 000021   | #5-57      |        |        |        |
| L.UNT   | 000013   | #5-57      |        |        |        |
| M\$MGE  | = 000000 | 5-56       | 5-56   | 10-128 | 10-131 |
| N\$SVCT | = *****  | 10-122     | 10-124 | 10-140 |        |
| R\$PRO  | = *****  | 8-70       |        |        |        |
| R\$RTR  | = *****  | 8-70       |        |        |        |
| R\$11M  | = 000000 | 10-131     |        |        |        |
| R\$11S  | = *****  | 8-70       |        |        |        |
| SF.ACT  | = 000200 | #5-57      |        |        |        |
| SF.ENA  | = 000100 | #5-57      |        |        |        |
| SF.LPB  | = 000004 | #5-57      |        |        |        |
| SF.MFL  | = 000040 | #5-57      |        |        |        |
| SF.PAC  | = 000020 | #5-57      |        |        |        |
| SF.REA  | = 000010 | #5-57      |        |        |        |
| SF.SER  | = 000001 | #5-57      |        |        |        |
| SF.SVC  | = 000002 | #5-57      |        |        |        |
| SF.UNL  | = 000040 | #5-57      |        |        |        |
| S\$BAS  | = *****  | 8-70       |        |        |        |
| S.COST  | 000001   | #5-57      |        |        |        |
| S.FLG   | 000000   | #5-57      |        |        |        |
| S.LEN   | 000004   | #5-57      |        |        |        |
| S.NMST  | 000002   | #5-57      |        |        |        |
| S.OWNR  | 000003   | #5-57      |        |        |        |
| T.DR    | 000002   | #5-56      |        |        |        |
| T.ER    | 000024   | #5-56      |        |        |        |
| T.FL    | 000004   | #5-56      |        |        |        |
| T.LEN   | = 000070 | #5-56      |        |        |        |
| T.LN    | = 000022 | #5-56      |        |        |        |
| T.OFFS  | = 000020 | #5-56      | 5-56   |        |        |
| T.RA    | 000006   | #5-56      |        |        |        |
| T.RC    | 000010   | #5-56      |        |        |        |



```

138 .SBTTL DCPCOU - READ AND/OR ZERO DDCMP COUNTERS
139
140
141
142
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145
146
147
148
149
150
151
152
153
154
155
156 000312
157 000312 005027
158
159 000314
160 000314 000261
161 000316 006005
162 000320
163 000324
164 000330
165 000334 103501
166 000336 016746 177442
167 000342 016746 177646
168 000346 006105
169 000350 012705 000000
170 000354 012746 000012
171 000360
172 000362 012700 000000
173
174 000366 032764 000910 000064
175 000374 001014
176 000376 103005
177 000400 005067 177400
178 000404 005067 177604
179 000410 000406
180 000412 012705 000004
181 000416 012766 000214 000002
182 000424 005300
183
184
185
186
187
188
189 000426 005002
190 000430 132764 000010 000041
191 000436 001406
192 000440 005302
193 000442 132764 000002 000041
194 000450 001401

      .SBTTL DCPCOU - READ AND/OR ZERO DDCMP COUNTERS
      **DCPCOU-READ AND/OR ZERO DDCMP COUNTERS
      THIS ROUTINE RETURNS THE LINE AND STATION COUNTERS
      FOR A DDCMP LINE.
      INPUTS:
      R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
      R4 = ADDRESS OF THE CONTEXT AREA
      OUTPUTS:
      R3 = ADDRESS OF NEXT FREE BYTE IN BUFFER
      REGISTERS:
      R4 IS PRESERVED

DCPLIN:: CLR (PC)+ ; ENTER WITH CARRY CLEAR

DCPCIR:: SEC ; INDICATE CIRCUIT COUNTERS
      ROR R5 ; SAVE LINE/CIRCUIT BIT
      SWSTK$ 30$ ; ENTER SYSTEM STATE
      SAVMAP ; SAVE CURRENT MAPPING
      CALL FNDDCP ; FIND THE LINE TABLES
      BCS 25$ ; IF CS, RETURN WITHOUT COUNTERS
      MOV DCPLN0,-(SP) ; SAVE CONTENTS OF TABLES AFTER
      MOV DCPLN1,-(SP) ; LINE INFO
      ROL R5 ; PICK UP ENTITY TYPE
      MOV #DCPCIO,R5 ; ASSUME V2.0 LINE COUNTERS
      MOV #DCPCI1,-(SP) ;
      SAVRG <R0> ; SAVE DDCMP LINE TABLE ADDRESS
      MOV #0,R0 ; CLEAR WITH MOV TO AVOID PROBLEMS
      ; WITH BCC BELOW
      BIT #LF$VR2,L$FLG(R4) ; CONNECTED TO VERSION 2.0 NCP ?
      BNE 5$ ; IF NE, WANT BOTH SETS OF COUNTERS
      BCC 3$ ; IF CC, V3.0 LINE COUNTERS
      CLR DCPLN0 ; ELSE MARK TABLES DONE
      CLR DCPLN1 ; AFTER CIRCUIT INFO
      BR 5$ ; JOIN COMMON CODE
      MOV #DCPLN0,R5 ; V3.0 LINE LINE COUNTERS ONLY
      MOV #DCPLN1,2(SP) ;
      DEC R0 ; SET POINT TO POINT ADJUSTMENT

      ; SET UP R2 SO THAT THE PROPER COUNTERS ARE RETURNED:
      ; 0 = POINT-TO-POINT
      ; -1 = MULTIPOINT CONTROLLER COUNTERS
      ; +1 = MULTIPOINT TRIB COUNTERS

3$:
5$: CLR R2 ; ASSUME RETURN ALL COUNTERS (PT TO PT)
      BITB #LP$MPT,L$PFG(R4) ; IS THIS A MULTIPOINT LINE ?
      BEQ 10$ ; IF EQ, NO - RETURN ALL
      DEC R2 ; ASSUME ONLY RETURN CONTROLLER COUNTERS
      BITB #LP$TRB,L$PFG(R4) ; WAS A TRIBUTARY SPECIFIED ?
      BEQ 10$ ; IF EQ, NO

```

K 10

DEALUN - DEASSIGN TEMPORARY LUN MACRO V05.03b Saturday 29-Jun-85 17:42 Page 6

DEALUN - DEASSIGN TEMPORARY LUN

```

66                                     .SBTTL DEALUN - DEASSIGN TEMPORARY LUN
67                                     ;+
68                                     ;*-DEALUN-DEASSIGN THE TEMPORARY LUN
69                                     ;
70                                     ; THIS ROUTINE IS CALLED TO CLEAR THE UCB POINTER FOR THE
71                                     ; TEMPORARY MULTI-PURPOSE LUN '$TMLUN', IN THE TASK HEADER.
72                                     ; THIS IS NECESSARY TO REASSIGN THE LUN IF IT HAD PREVIOUSLY
73                                     ; BEEN ASSIGNED TO A DEVICE WHICH WAS ATTACHED.
74                                     ; -
75
76 000000 DEALUN::
77 000000 SWSTK$ 10$                ;; ENTER SYSTEM STATE
78                                     .IF NDF,1$$AS
79
80                                     .IF DF,R$$MPL
81
82 SAVMAP                                ;; SAVE CURRENT KISAR6 MAPPING
83 MOV @SAHDB,@KSAR6                    ;; MAP TO MY EXTERNAL HEADER
84 MOV @SAHPT,R0                        ;; POINT TO THE HEADER
85 CLR <H.LUN+<4*<$TMLUN-1>>>(R0)      ;; CLEAR THE LUT UCB POINTER
86 RESMAP                                ;; RESTORE PREVIOUS KISAR6
87
88                                     .IFF ; DF R$$MPL
89
90 000004 017700 000000G MOV @HEADR,R0                ;; GET OUR HEADER ADDRESS
91 000010 005060 000000C CLR <H.LUN+<4*<$TMLUN-1>>>(R0) ;; CLEAR THE LUT UCB POINTER ; RJK01
92
93                                     .ENDC ; DF R$$MPL
94
95                                     .IFF
96 SAVMAP                                ;; SAVE CURRENT MAPPING
97 MOV .CRTSK,R0                        ;; ATL ENTRY FOR CURRENT TASK
98 MAP A,HA(R0)                        ;; MAP TO HEADER FOR TASK
99 CLR <40000+H.LUT+2+<4*<$TMLUN-1>>> ;; CLEAR THE LUT PUD POINTER
100 RESMAP
101 .ENDC
102
103 000014 10$: RETURN                ;; RETURN TO USER STATE AND TO CALLER
104
105 000001 .END

```

```

183      ;
184      ; Error passed back from process
185      ;
186 000344 022701 100350 60$: CMP #CE.ILN,R1      ;; Illegal station number ?
187 000350 001416      BEQ 65$      ;; If EQ, success - no information
188 000352 022701 100344      CMP #CE.UNS,R1      ;; Unsupported operation ?
189 000356 001413      BEQ 65$      ;; If EQ, success - no information
190 000360 022701 100362      CMP #CE.ABO,R1      ;; Aborted by DDM (UNA line counters )?
191 000364 001410      BEQ 65$      ;; If EQ, success - no information
192 000366 012766 177747 000000G      MOV #ME.OPE,R$RO(SP)      ;; Else operation failed
193 000374      RETC R0      ;; Set user carry
194      ;
195      ; Return LDB to system
196      ;
197 000406 010504 65$: MOV R5,R4      ;; Copy CCB address
198 000410      CALL @LDBRT      ;; Return buffer ; RJK01
199 000414 70$: RETURN      ;; Back to user state and return
200

```

DLCCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:22      PAGE 5      K 12  
SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE      | REFERENCES       |
|---------|------------|------------------|
| Z.FLG   | 000010     | #5-55            |
| Z.LEN   | = 000016   | #5-55            |
| Z.LLN   | 000006     | #5-55            |
| Z.MAP   | 000020     | #5-55      9-236 |
| Z.NAM   | 000004     | #5-55            |
| Z.PCB   | 000012     | #5-55            |
| Z.SCH   | 000007     | #5-55            |
| \$HEADR | = ***** GX | 8-193      9-279 |
| \$PRCCO | 000004 RG  | #8-94            |
| \$PRLCO | 000002 RG  | #8-92            |

DLMCOU - READ/AND OR ZERO DLM C MACRO V05.03b Saturday 29-Jun-85 12:22 <sup>K 13</sup> Page 11-1  
FNDDLM - FIND THE DLM LINE TABLE FOR A CIRCUIT

|     |        |        |       |        |            |
|-----|--------|--------|-------|--------|------------|
| 184 | 000216 | 000241 | 40\$: | CLC    | :: SUCCESS |
| 185 | 000220 |        | 50\$: | RETURN |            |
| 186 |        |        |       |        |            |
| 187 |        | 000001 |       | .END   |            |

DLXQIO - ISSUE I/O TO DLX  
MACRO CALLS AND LOCAL DATA

MACRO V05.03b Saturday 29-Jun-85 <sup>K 14</sup> 12:23 Page 5

55  
56  
57  
58  
59  
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61  
62  
63  
64  
65  
66  
67  
68

000000

```
.SBTTL  MACRO CALLS AND LOCAL DATA
;
; MACRO LIBRARY CALLS
;
.MCALL  SAVRG,RESRG,CICCX$
.MCALL  ALUN$$,WSIG$$,QIOW$$,QIO$$,GLUN$$
;
; LOCAL DATA
;
.IF NDF M$$ACP
IOSB:   .BLKW  2                      ; I/O STATUS BLOCK FOR DLX QIO
.ENDC   ;NDF M$$ACP
```

DLXQIO CREATED BY MACRO ON 29-JUN-85 AT 12:23 PAGE 3 K 15  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE      | REFERENCES         |
|---------|------------|--------------------|
| L\$LCCT | 000224     | #6-75              |
| L\$LEN  | 000264     | #6-75              |
| L\$LMB  | 000234     | #6-75              |
| L\$LTM  | 000230     | #6-75              |
| L\$MRT  | 000253     | #6-75              |
| L\$MSG  | 000056     | #6-75 *8-182       |
| L\$MTYP | 000075     | #6-75              |
| L\$MWN  | 000252     | #6-75              |
| L\$MXB  | 000133     | #6-75              |
| L\$MXR  | 000253     | #6-75              |
| L\$MXW  | 000252     | #6-75              |
| L\$NAM  | 000000     | #6-75              |
| L\$NLEN | = 000020   | #6-75 6-75 6-75    |
| L\$NMT  | 000116     | #6-75              |
| L\$NTI  | 000256     | #6-75              |
| L\$NTL  | 000134     | #6-75              |
| L\$NUM  | 000240     | #6-75              |
| L\$NUML | 000236     | #6-75              |
| L\$NXT  | 000044     | #6-75              |
| L\$OPT  | 000062     | #6-75              |
| L\$OWN  | 000102     | #6-75              |
| L\$PAR  | 000072     | #6-75              |
| L\$PDV  | 000055     | #6-75              |
| L\$PFG  | 000041     | #6-75              |
| L\$PLT  | 000112     | #6-75              |
| L\$PRO  | 000075     | #6-75              |
| L\$PVC  | 000004     | #6-75              |
| L\$RET  | 000256     | #6-75              |
| L\$SCN  | 000020     | #6-75              |
| L\$SCR  | 000166     | #6-75 8-119 9-205  |
| L\$SER  | 000230     | #6-75              |
| L\$SLEN | 000074     | #6-75              |
| L\$SLT  | 000042     | #6-75              |
| L\$SNM  | 000046     | #6-75              |
| L\$STA  | 000100     | #6-75              |
| L\$TAD  | 000103     | #6-75              |
| L\$TH1  | 000130     | #6-75              |
| L\$TH2  | 000131     | #6-75              |
| L\$TH3  | 000132     | #6-75              |
| L\$TNM  | 000052     | #6-75              |
| L\$TPT  | 000050     | #6-75              |
| L\$TRB  | 000040     | #6-75              |
| L\$TYP  | 000063     | #6-75              |
| L\$UNT  | 000003     | #6-75              |
| L\$XCH  | 000232     | #6-75              |
| L\$XMT  | 000120     | #6-75              |
| M\$SACP | = *****    | 4-1 4-2 4-64 8-116 |
| R\$SPRO | = *****    | 6-75 6-75          |
| R\$SRT  | = *****    | 8-132              |
| S\$SBAS | = *****    | 8-132              |
| \$CBDSG | = ***** GX | 8-178              |
| \$DSW   | = ***** GX | 8-158              |

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 Page 9-1  
DLXQIO - ISSUE I/O REQUEST TO NX:

```

148
149
150
151
152
153 000056
154
155
156
157 000116 103010
158 000120 026727 000000G 000000G
159 000126 001025
160 000130
161 000136 000747
162 000140
163
164
165
166
167
168
169
170 000140
171 000144 116701 000000G
172
173
174
175 000150 003014
176 000152 012700 000014'
177 000156 005002
178 000160
179 000164 012701 000001'
180 000170 160100
181 000172 110041
182 000174 010164 000056
183 000200 000261
184 000202

10$: QIOW$$ R0,#$TMLUN,$$TMEFN,,#IOSB,<R3,R2,R1> ; ISSUE I/O
      .IFF ;NDF M$$ACP

10$: QIO$$ R0,$$TMLUN,,R5,$$DLXAST,<R3,R2,R1> ; ISSUE I/O
      .JFTF ;NDF M$$ACP

      BCC 20$ ; IF CC, DIRECTIVE SUCCEEDED
      CMP $DSW,#IE.UPN ; ELSE WAS IT A RESOURCE ERROR ?
      BNE 40$ ; IF NE, NO - REAL ERROR
      WSIG$$ ; ELSE, WAIT AROUND A WHILE
      BR 10$ ; AND TRY IT AGAIN

20$: .IFT ;NDF M$$ACP

      MOVB IOSB,R1 ; GET STATUS RETURN

      .IFF ;NDF M$$ACP

      CALL FORK ; FORK AND WAIT FOR QIO COMPLETION
      MOVB STATUS,R1 ; GET THE STATUS RETURN

      .ENDC ;NDF M$$ACP

      BGT 40$ ; IF GT, SUCCESS
      MOV #DLXERR,R0 ; POINT TO ASCII ERROR CODE BUFFER
      CLR R2 ; ENABLE ZERO SUPPRESSION
      CALL $CBDSG ; CONVERT IT TO SIGNED DECIMAL
      MOV #DLXTXT,R1 ; POINT TO ERROR TEXT
      SUB R1,R0 ; CALC STRING LENGTH
      MOVB R0,-(R1) ; SET STRING LENGTH
      MOV R1,L$MSG(R4) ; SET ERROR MESSAGE ADDRESS
      SEC ; ELSE, NO
      RETURN

40$:

```



|          |        |          |        |         |        |         |        |          |        |    |
|----------|--------|----------|--------|---------|--------|---------|--------|----------|--------|----|
| MP\$MLP  | 006333 | MP\$PSS  | 001763 | MP\$TYP | 002130 | MT\$CLE | 000077 | M\$CRX=  | 000000 |    |
| MP\$MPB  | 002171 | MP\$PST  | 001762 | MP\$UCS | 004407 | MT\$COD | 000200 | M\$FCS=  | 000000 |    |
| MP\$MRO  | 001605 | MP\$RET  | 001631 | MP\$USR | 001750 | MT\$CON | 000001 | M\$MGE=  | 000000 |    |
| MP\$MRP  | 006322 | MP\$RFA  | 001323 | MP\$VEC | 004410 | MT\$DMC | 000004 | M\$NET=  | 000000 |    |
| MP\$MRT  | 002153 | MP\$RMX  | 002201 | MP\$VER | 004406 | MT\$ETH | 000006 | M\$OVR=  | 000000 |    |
| MP\$MRV  | 006320 | MP\$RPA  | 004374 | MP\$WDF | 002165 | MT\$HEX | 000040 | NM.CLN   | 003400 |    |
| MP\$MSB  | 000170 | MP\$RRP  | 001606 | MP\$WMX | 002177 | MT\$LPB | 000005 | NM.INI   | 002400 |    |
| MP\$MVE  | 000145 | MP\$RRR  | 002213 | MP\$XMT | 002166 | MT\$MAX | 000037 | NM.OPR   | 003000 |    |
| MP\$MVI  | 001634 | MP\$RST  | 002212 | MP\$XPF | 000242 | MT\$MUL | 000100 | NM.VR2   | 002401 |    |
| MP\$MVR  | 001751 | MP\$RSV  | 001754 | MP\$XPL | 000244 | MT\$NLE | 000017 | NM.VR3   | 002402 |    |
| MP\$MWN  | 002154 | MP\$RSZ  | 001756 | MP\$XPT | 000240 | MT\$NON | 000001 | NXTCIR=  | *****  | GX |
| MP\$MXB  | 002172 | MP\$RTI  | 001616 | MP\$XXX | 1777.7 | MT\$NR4 | 000005 | N\$ACC=  | 000001 |    |
| MP\$MXC  | 000466 | MP\$RTM  | 001611 | MP\$5ST | 004406 | MT\$NTY | 000060 | N\$BUF=  | 000001 |    |
| MP\$MXR  | 001630 | MP\$RVE  | 001604 | MS\$ACT | 000001 | MT\$OCT | 000060 | N\$LDV=  | 000001 |    |
| MP\$MXW  | 002143 | MP\$RVT  | 000156 | MS\$ADU | 000010 | MT\$PHA | 000002 | N\$MCP=  | 000001 |    |
| MP\$NAA  | 006335 | MP\$SAC  | 000514 | MS\$ALO | 000007 | MT\$PDI | 000000 | N\$MLL=  | 000001 |    |
| MP\$NAC  | 001130 | MP\$SAD  | 000543 | MS\$ASE | 000006 | MT\$Q2P | 000010 | N\$MOV=  | 000010 |    |
| MP\$NAP  | 006326 | MP\$SCA  | 000310 | MS\$ATR | 000011 | MT\$ROU | 000000 | N\$NCT=  | 000001 |    |
| MP\$NCT  | 000240 | MP\$SCO  | 000144 | MS\$AUT | 000000 | MT\$RO4 | 000004 | N\$PEM=  | 000001 |    |
| MP\$NET  | 002114 | MP\$SCT  | 002176 | MS\$CLE | 000003 | MT\$SEC | 000000 | P\$P45=  | 000000 |    |
| MP\$NL1  | 000765 | MP\$SDU  | 000203 | MS\$DED | 000004 | MT\$SGD | 000020 | P\$SWRD= | 000000 |    |
| MP\$NNA  | 000764 | MP\$SDV  | 000160 | MS\$DIU | 000003 | MT\$SYS | 000002 | Q\$OPT=  | 000010 |    |
| MP\$NOD  | 000500 | MP\$SEH  | 004401 | MS\$DIU | 000004 | MT\$TER | 000001 | R\$DER=  | 000000 |    |
| MP\$NRA  | 006334 | MP\$SER  | 000144 | MS\$FAI | 000013 | MT\$TRI | 000002 | R\$K11=  | 000001 |    |
| MP\$NRB  | 000214 | MP\$SET  | 000000 | MS\$GLO | 000000 | MT\$TYP | 007777 | R\$SND=  | 000000 |    |
| MP\$NSA  | 001617 | MP\$SGZ  | 001644 | MS\$HOL | 000002 | MT\$USD | 000000 | R\$11M=  | 000000 |    |
| MP\$NTI  | 002141 | MP\$SID  | 000176 | MS\$INA | 000002 | MT\$X25 | 000003 | S\$ANM   | 000001 |    |
| MP\$NUM  | 001642 | MP\$SSIN | 000310 | MS\$LOA | 000003 | MUSINC  | 000001 | S\$DNM   | 000002 |    |
| MP\$NVE  | 001274 | MP\$SLI  | 000156 | MS\$LOO | 000002 | MUSOUT  | 000002 | SF.ACT=  | 000200 |    |
| MP\$NXX= | 001476 | MP\$SLO  | 000171 | MS\$OFF | 000001 | MUSPER  | 000000 | SF.ENA=  | 000100 |    |
| MP\$OAC  | 000632 | MP\$SMX  | 002202 | MS\$ON  | 000000 | MV\$III | 000000 | SF.LPB=  | 000004 |    |
| MP\$OAN  | 000620 | MP\$SND  | 000500 | MS\$PRO | 000006 | MV\$IV  | 000001 | SF.MFL=  | 000040 |    |
| MP\$OCO  | 000776 | MP\$SNP  | 006332 | MS\$REA | 000004 | MX\$ACT | 000020 | SF.PAC=  | 000020 |    |
| MP\$OHO  | 000214 | MP\$SSU  | 000542 | MS\$REF | 000001 | MX\$CIR | 000020 | SF.REA=  | 000010 |    |
| MP\$ONA  | 000764 | MP\$SOB  | 000524 | MS\$RES | 000003 | MX\$CLN | 000020 | SF.SER=  | 000001 |    |
| MP\$ONR  | 002114 | MP\$SPA  | 000157 | MS\$RST | 000001 | MX\$CNM | 000006 | SF.SVC=  | 000002 |    |
| MP\$OGL  | 001453 | MP\$SPR  | 000536 | MS\$RSX | 000002 | MX\$CON | 000006 | SF.UNL=  | 000040 |    |
| MP\$OTI  | 000777 | MP\$SPS  | 000513 | MS\$RT  | 000005 | MX\$DAC | 000020 | S\$WRG=  | 000000 |    |
| MP\$OTY  | 001022 | MP\$STA  | 000000 | MS\$SER | 000002 | MX\$DTE | 000020 | S\$YSZ=  | 007600 |    |
| MP\$OUS  | 000777 | MP\$STI  | 002140 | MS\$SHU | 000002 | MX\$FIL | 000034 | S.COST   | 000001 |    |
| MP\$OVE  | 001010 | MP\$STT  | 002201 | MS\$SRV | 000007 | MX\$LGC | 000777 | S.FLG    | 000000 |    |
| MP\$OWN  | 00474  | MP\$STY  | 000175 | MS\$STA | 000000 | MX\$LIN | 000020 | S.LEN    | 000004 |    |
| MP\$PAR  | 000036 | MP\$SUB  | 000001 | MS\$SYN | 000012 | MX\$LOO | 000006 | S.NMST   | 000002 |    |
| MP\$PAS  | 000513 | MP\$SUR  | 000156 | MS\$TER | 000001 | MX\$NMS | 000454 | S.OWNR   | 000003 |    |
| MP\$PCH  | 002152 | MP\$SUS  | 000512 | MS\$TOP | 000003 | MX\$NOD | 000006 | T\$KMG=  | 000000 |    |
| MP\$PCO  | 000024 | MP\$SVR  | 000163 | MS\$TRI | 000005 | MX\$OBJ | 000006 | T\$MIN=  | 000000 |    |
| MP\$PCT  | 000144 | MP\$SWI  | 002260 | MS\$UNR | 000005 | MX\$OWN | 000040 | V\$CTR=  | 001000 |    |
| MP\$PDT  | 002114 | MP\$SYF  | 002424 | MS\$VMS | 000004 | MX\$PAR | 000036 | X\$DBT=  | 000000 |    |
| MP\$PHA  | 000170 | MP\$TFL  | 000156 | MS.DON  | 177600 | MX\$PAS | 000010 | ZF.COU=  | 001000 |    |
| MP\$PHY  | 000012 | MP\$TH1  | 002206 | MS.MOR  | 000002 | MX\$RAC | 000047 | ZF.DDM=  | 000001 |    |
| MP\$PLI  | 000025 | MP\$TH2  | 002205 | MS.PAR  | 000003 | MX\$RID | 000047 | ZF.DIA=  | 004000 |    |
| MP\$PLN  | 002140 | MP\$TH3  | 002202 | MS.SUC  | 000001 | MX\$RPS | 000047 | ZF.DLC=  | 000002 |    |
| MP\$PLO  | 000012 | MP\$TLN  | 000202 | MT\$AR4 | 000003 | MX\$SID | 000040 | ZF.DVP=  | 100000 |    |
| MP\$PMC  | 004374 | MP\$TLO  | 000172 | MT\$ASC | 000100 | MX\$SNK | 000377 | ZF.INI=  | 040000 |    |
| MP\$PNT  | 002126 | MP\$TPA  | 004375 | MT\$BIL | 000001 | MX\$TYP | 000077 | ZF.KMX=  | 000020 |    |
| MP\$PRI  | 004411 | MP\$TRI  | 002164 | MT\$BYS | 000011 | MX\$UID | 000020 | ZF.LLC=  | 000004 |    |
| MP\$PRO  | 002130 | MP\$TST  | 000144 | MT\$CI  | 000007 | M\$CRB= | 000124 | ZF.LMC=  | 000100 |    |

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193
194 000200 012700 000007 35$: MOV #7,R0 ; SET TABLE WIDTH (NUMBER OF SUB-STATES)
195 000204 : CALL $MUL ; POINT TO STATE ROW IN TABLE
196 000210 060201 : ADD R2,R1 ; POINT TO SUB-STATE ENTRY
197 000212 116102 000005: MOVBL SUBTBL(R1),R2 ; GET THE RETURN SUB-STATE
198 000216 002024 : BGE 45$ ; IF GE, RETURN IT
199 000220 120227 177777 : CMPB R2,#-1 ; ELSE, NO SUB-STATE TO RETURN ?
200 000224 001426 : BEQ 50$ ; IF EQ, YES - SKIP OVER PARAMETER
201 000226 : CALL FNDPLD ; FIND PLD FOR THE LINE
202 000232 103003 : BCC 40$ ; IF CC, GOT IT
203 000234 : CALL SNACIR ; ELSE, MIGHT BE SNA CIRCUIT
204 000240 000420 : BR 50$ ; MERGE
205 000242 012702 000013 40$: MOV #MS$FAI,R2 ; ASSUME SUB-STATE = FAILED
206 000246 126127 000000 000014 : CMPB P$LIST(R1),#PS$FAI ; IS SUB-STATE FAILED?
207 000254 001405 : BEQ 45$ ; BR IF YES
208 000256 005002 : CLR R2 ; ASSUME SUB-STATE = STARTING
209 000260 126127 000000 000012 : CMPB P$LIST(R1),#PS$UP ; ELSE, IS THERE A NODE OUT THERE ?
210 000266 001405 : BEQ 50$ ; IF EQ, YES - NO SUB-STATE
211 000270 004567 000000CG 45$: JSR R5,SETPAR ; RETURN SUB-STATE PARAMETER TYPE
212 000274 000001 : .WORD MP$SUB ;
213 000276 000201 : .WORD MT$COD:1 ; ONE CODED BYTE
214 000300 110223 : MOVBL R2,(R3)+ ; SET SUB-STATE IN MESSAGE
215
216 ; RETURN THE LOOPBACK NAME IF THERE IS ONE
217
218 000302 016400 000042 50$: MOV L$SLT(R4),R0 ; GET THE SLT ADDRESS
219 000306 105760 000014 : TSTB L,NSTA(R0) ; MULTIPOINT MASTER ?
220 000312 001004 : BNE 55$ ; IF NE, YES
221 000314 032760 001000 000000 : BIT #LF.LPB,L.FLG(R0) ; IS THERE A LOOPBACK NAME ?
222 000322 000405 : BR 60$ ;
223 000324 016400 000050 55$: MOV L$TPT(R4),R0 ; POINT TO THE STATION FLAGS
224 000330 032760 000004 000000 : BIT #SF.LPB,S.FLG(R0) ; CHECK FOR LOOPBACK NAME
225 000336 001416 : BEQ 65$ ; IF EQ, NONE
226 000340 010400 : MCV R4,R0 ; POINT TO SCRATCH BUFFER FOR NAME
227 000342 062700 000072 : ADD #L$SCR,R0 ;
228 000346 116401 000054 : MOVBL L$CHN(R4),R1 ; SET CHANNEL NUMBER
229 000352 : CALL MAPCHN ; MAP THE CHANNEL TO A NAME
230 000356 103406 : BCS 65$ ; IF CS, NO NAME FOUND
231 000360 004567 000000G : JSR R5,SETPAR ; RETURN LOOP NAME PARAMETER TYPE
232 000364 000620 : .WORD MP$L00 ;
233 000366 000100 : .WORD MT$ASC ; ASCII IMAGE FIELD
234 000370 : CALL SETNAM ; SET A NAME IN THE BUFFER
235
236 ; RETURN ADJACENT NODE ADDRESS AND NAME IF ONE EXISTS
237
238 000374 : 65$: CALL FNDPLD ; FIND PHYSICAL LINK DATA BASE
239 000400 103515 : BCS 75$ ; IF CS, LINE NOT OWNED BY TRANSPORT
240 000402 126127 000000 000012 : CMPB P$LIST(R1),#PS$UP ; ELSE, IS THE LINK UP ?
241 000410 001111 : BNE 95$ ; IF NE, NO - SKIP ADJACENT NODE PARAMETERS
242
243 ; Get adjacent node: Non Ethernet circuit, router
244
245 000412 032764 000020 000064 : BIT #LF$END,L$FLG(R4) ; else, is this an end node ?
246 000420 001077 : BNE 75$ ; if NE, yes
247 000422 132761 000200 000001 : BITB #PT$BRO,P$TYP(R1) ; is circuit a broadcast channel ?
248 000430 001024 : BNE 67$ ; if NE, yes
249 000432 017701 000000G : MOV @DECPT,R1 ; point to DECnet homeblock ; RJK05

```

CIREST - READ CIRCUIT STATUS  
Symbol table

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|                                      |                   |                  |                   |                   |
|--------------------------------------|-------------------|------------------|-------------------|-------------------|
| MUSINC 000001                        | N\$DLA 000020     | PF\$EIP= 000002  | P\$NRNI 000040    | S\$\$WRG= 000000  |
| MUSOUT 000002                        | N\$DLY 000014     | PF\$ENB= 000001  | P\$OCCB 000050    | S\$\$YSZ= 007600  |
| MUSPER 000000                        | N\$ELEN 000054    | PF\$FAI= 004000  | P\$PFQ 000006     | S.COST 000001     |
| MV\$III 000000                       | N\$ENC 000042     | PF\$FM1= 000100  | P\$PKSZ 000044    | S.FLG 000000      |
| MV\$IV 000001                        | N\$ERRC 000025    | PF\$FM2= 000200  | P\$RMX1 000016    | S.LEN 000004      |
| MX\$ACT 000020                       | N\$FLG 000005     | PF\$OFF= 000000  | P\$RMX2 000020    | S.NMST 000002     |
| MX\$CIR 000020                       | N\$FNC 000006     | PF\$RM1= 000020  | P\$RPRI 000042    | S.OWNR 000003     |
| MX\$CLN 000020                       | N\$GENQ 000052    | PF\$RM2= 000040  | P\$RTIM 000003    | TEMP 000050R      |
| MX\$CNM 000006                       | N\$GTM 000015     | PF\$SRV= 000010  | P\$STA1 000022    | T\$\$KMG= 000000  |
| MX\$CON 000006                       | N\$HC1 000052     | PF\$STA= 000004  | P\$STA2 000023    | T\$\$MIN= 000000  |
| MX\$DAC 000020                       | N\$HC2 000056     | PF\$SVC= 040000  | P\$TIM 000010     | V\$RCV= 100000    |
| MX\$DTE 000020                       | N\$HIGH 000033    | PF\$UP= 000004   | P\$TSCT 000026    | V\$XMT= 040000    |
| MX\$FIL 000034                       | N\$LLT 000026     | PR\$BED= 000200  | P\$TSIZ 000024    | V\$FLG 000000     |
| MX\$LGC 000777                       | N\$LLTM 000024    | PR\$BEU= 000100  | P\$TYP 000001     | V\$LEN 000022     |
| MX\$LIN 000020                       | N\$LVC 000036     | PR\$BRD= 000040  | P\$P45= 000000    | V\$RCV 000002     |
| MX\$LON 000006                       | N\$LV1 000002     | PR\$BRU= 000020  | P\$WRD= 000000    | V\$XMT 000012     |
| MX\$NMS 000454                       | N\$LV2 000010     | PR\$DWN= 000002  | P.CHAN= 000000    | V\$CTCR= 001000   |
| MX\$NOD 000006                       | N\$MBXQ 000050    | PR\$LCC= 000010  | P.STSC= 000004    | X\$SDBT= 000000   |
| MX\$OBJ 000006                       | N\$MHC1 000036    | PR\$MOP= 000004  | Q\$OPT= 000010    | ZF.COU= 001000    |
| MX\$OWM 000040                       | N\$MHC2 000044    | PR\$UP= 000001   | RF.CTL= 000003    | ZF.DDM= 000001    |
| MX\$PAR 000036                       | N\$PLD 000016     | PSICIR= ***** GX | RF.LD1= 000040    | ZF.DIA= 004000    |
| MX\$PAS 000010                       | N\$PLT 000030     | PS\$CHR= 000016  | RF.LD2= 000100    | ZF.DLC= 000002    |
| MX\$RAD 000047                       | N\$PRI 000076     | PS\$FAI= 000014  | RF.TIM= 177400    | ZF.DVP= 100000    |
| MX\$RID 000047                       | N\$ROA1 000022    | PS\$NTI= 000006  | RF.TMO= 000400    | ZF.INI= 040000    |
| MX\$RPS 000047                       | N\$ROA2 000030    | PS\$OFF= 000000  | RF.WFC= 000200    | ZF.KMX= 000020    |
| MX\$SID 000040                       | N\$RTMX 000014    | PS\$STR= 000002  | RF.WTD= 000020    | ZF.LLC= 000004    |
| MX\$SNK 000377                       | N\$RTM1 000014    | PS\$UP= 000012   | RF.WTM= 000030    | ZF.LMC= 000100    |
| MX\$TYP 000077                       | N\$RTM2 000015    | PS\$VER= 000010  | RF.WTS= 000010    | ZF.MAN= 020000    |
| MX\$UID 000020                       | N\$RT1 000000     | PS\$WT= 000004   | R\$R1 = ***** GX  | ZF.MFL= 000010    |
| M\$S\$CRB= 000124                    | N\$RT2 000006     | PT\$BRO= 000200  | R\$R2 = ***** GX  | ZF.MTM= 000400    |
| M\$S\$CRX= 000000                    | N\$SLA 000016     | PT\$DRT= 000100  | R\$S\$DER= 000000 | ZF.MUX= 000040    |
| M\$S\$FCS= 000000                    | N\$SNOD 000012    | PT\$END= 000004  | R\$S\$K11= 000001 | ZF.PSE= 002000    |
| M\$S\$MGE= 000000                    | N\$STCTL 000112   | PT\$LV1= 000002  | R\$S\$ND= 000000  | ZF.SLI= 010000    |
| M\$S\$NET= 000000                    | N\$T1M 000004     | PT\$LV2= 000001  | R\$S\$11M= 000000 | ZF.TIM= 000200    |
| M\$S\$QVR= 000000                    | N\$TLC 000100     | PT\$PH3= 000010  | SETNAM 001330R    | ZF.X3P= 000000    |
| NF\$BLK= 000100                      | N\$TNC 000114     | PT\$XAR= 000020  | SETPAR= ***** GX  | ZS.ASN= 100000    |
| NF\$DMO= 000010                      | N\$TRC 000106     | PUTNOD 001146R   | SF\$ANM 000001    | ZS.BSY= 140000    |
| NF\$MOU= 000040                      | N\$TTCB 000110    | PU.SCP= 000002   | SF\$DNM 000002    | Z.AVL 000014      |
| NF\$RST= 000002                      | N\$VCB 000010     | PX\$BLK= 000040  | SF.ACT= 000200    | Z.DAT 000016      |
| NF\$SCN= 000020                      | N\$VER 000066     | PX\$DLM= 000200  | SF.ENA= 000100    | Z.DSP 000000      |
| NF\$SHU= 000004                      | N\$XLEN 000124    | PX\$SVC= 000100  | SF.LPB= 000004    | Z.FLG 000010      |
| NF\$TIM= 000200                      | N\$S\$ACC= 000001 | P\$CHN 000004    | SF.MFL= 000040    | Z.LEN = 000016    |
| NM.CLN 003400                        | N\$S\$BUF= 000001 | P\$CNT 000005    | SF.PAC= 000020    | Z.LLN 000006      |
| NM.INI 002400                        | N\$S\$LDV= 000001 | P\$CTR 000034    | SF.REA= 000010    | Z.MAP 000020      |
| NM.OPR 003000                        | N\$S\$MCP= 000001 | P\$DRCT 000015   | SF.SER= 000001    | Z.NAM 000004      |
| NM.VR2 002401                        | N\$S\$MLL= 000001 | P\$DRT1 000036   | SF.SVC= 000002    | Z.PCB 000012      |
| NM.VR3 002402                        | N\$S\$MOV= 000010 | P\$FLG 000012    | SF.UNL= 000040    | Z.SCH 000007      |
| N\$AQ 000000                         | N\$S\$NCT= 000001 | P\$FWD 000030    | SNACIR 001470R    | \$CEACC= ***** GX |
| N\$ACTL 000032                       | N\$S\$PEM= 000001 | P\$ICCB 000046   | SNAPT = ***** GX  | \$HEADR= ***** GX |
| N\$ADJ1 000072                       | PDVID = ***** GX  | P\$IPL 000014    | SPACE = 000040    | \$MUL = ***** GX  |
| N\$ADJ2 000074                       | PDVTA = ***** GX  | P\$LCD 000002    | STATBL 000000R    | \$S\$R = 000010   |
| N\$CACH 000062                       | PF\$BLK= 020000   | P\$LEN 000052    | SUBTBL 000005R    | \$S\$SYS= 004374  |
| N\$CIR 000034                        | PF\$CLC= 010000   | P\$LST 000000    | \$PUNX= 000006    | \$S\$SYX= 000000  |
| N\$CRC 000120                        | PF\$DLM= 100000   |                  |                   |                   |
| . ABS. 177776 000 (RW,I,GBL,ABS,OVR) |                   |                  |                   |                   |
| 001630 001 (RW,I,LCL,REL,CON)        |                   |                  |                   |                   |

```

;
; FLAGS WORD BIT DEFINITIONS (L$FLG)
;
000001      LFS$REA = 1      ; READ COUNTERS OPERATION
000002      LFS$ZER = 2      ; ZERO COUNTERS OPERATION
000004      LFS$SKP = 4      ; SKIP NEXT "FIND NEXT LINE" OPERATION.
                        ; THIS IS USED TO FORCE AN EXTRA PASS
                        ; FOR A MULTIPOINT LINE TO RETURN THE
                        ; CONTROLLER COUNTERS AS WELL AS ALL
                        ; OF THE TRIBUTARY COUNTERS.
000010      LFS$VR2 = 10     ; CONNECTED TO VERSION 2.0 NCP
040000      LFS$MLT = 40000  ; MULTIPLE ADJACENCY FLAG
100000      LFS$SEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS

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```

;
; PARSE FLAG DEFINITIONS (L$PFG)
;
000001      LP$UNT = 1      ; UNIT NUMBER FOUND
000002      LP$TRB = 2      ; TRIBUTARY NUMBER FOUND
000004      LP$MUX = 4      ; DEVICE IS MUX
000010      LP$MPT = 10     ; LINE IS MULTIPOINT
000020      LP$WDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      LP$WCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      LP$WUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      LP$WTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LP$WLD = LP$WDV!LP$WCN!LP$WUN!LP$WTR ; WILD CARD FIELD MASK

```

```

;
; FLAGS WORD BIT DEFINITIONS (L$FLG)
;
000001      LS$NTL=1        ; NTL SET FUNCTION
000002      LS$STA=2        ; SET STATE
000004      LS$COS=4        ; SET CUST
000010      LS$OWN=10       ; SET OWNER
000020      LS$TAD=20       ; SET TRIBUTARY ADDRESS
000040      LS$ACT=40       ; SET MULTIPOINT ACTIVE
000100      LS$DEA=100      ; SET MULTIPOINT DEAD
000200      LC$NTL=200      ; NTL CLEAR FUNCTION
000400      LC$OWN=400      ; CLEAR OWNER
001000      LS$DDT=1000     ; SET DEAD TIMER
002000      LS$DLT=2000     ; SET DELAY TIMER
004000      LS$PLT=4000     ; SET POLL TIMER
010000      LS$BBT=10000    ; SET BABBLE TIMER
020000      LS$NMT=20000    ; SET NORMAL TIMER
040000      LS$XMT=40000    ; SET TRANSMIT TIMER
100000      LS$SER=100000   ; SET SERVICE [ENABLE/DISABLE]

```

```

;
; FLAGS WORD BIT DEFINITIONS (L$FL1)
;
000001      LS$BSA=1        ; SET ACTIVE BASE
000002      LS$BSD=2        ; SET DYING BASE
000004      LS$BSI=4        ; SET INACTIVE BASE
000010      LS$INA=10       ; SET ACTIVE INCREMENT
000020      LS$IND=20       ; SET DYING INCREMENT
000040      LS$INI=40       ; SET INACTIVE INCREMENT
000100      LS$TH1=100      ; SET DEAD THRESHOLD
000200      LS$TH2=200      ; SET DYING THRESHOLD
000400      LS$TH3=400      ; SET INACTIVE THRESHOLD
001000      LS$MXB=1000     ; SET MAXIMUM BLOCKS

```

CIRMAP CREATED BY MACRO ON 29-JUN-85 AT 12:20 PAGE 3 L 5  
 SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES                        |
|---------|----------|-----------------------------------|
| L\$ACT  | 000104   | #5-76 7-182                       |
| L\$BBT  | 000114   | #5-76                             |
| L\$BLK  | 000262   | #5-76                             |
| L\$BSA  | 000122   | #5-76                             |
| L\$BSD  | 000123   | #5-76                             |
| L\$BSI  | 000124   | #5-76                             |
| L\$BUF  | 000060   | #5-76                             |
| L\$CHN  | 000054   | #5-76                             |
| L\$CMB  | 000234   | #5-76                             |
| L\$COS  | 000101   | #5-76                             |
| L\$CTB  | 000053   | #5-76                             |
| L\$CTL  | 000002   | #5-76                             |
| L\$CUS  | 000260   | #5-76                             |
| L\$DDM  | 000000   | #5-76                             |
| L\$DDT  | 000106   | #5-76                             |
| L\$DEA  | 000105   | #5-76 8-227                       |
| L\$DLT  | 000110   | #5-76                             |
| L\$DTE  | 000240   | #5-76                             |
| L\$DTEL | 000236   | #5-76                             |
| L\$DTEP | 000250   | #5-76                             |
| L\$FLG  | 000064   | #5-76                             |
| L\$FLX  | 000076   | #5-76                             |
| L\$FL1  | 000066   | #5-76                             |
| L\$FL2  | 000070   | #5-76                             |
| L\$HBT  | 000254   | #5-76                             |
| L\$HTM  | 000226   | #5-76                             |
| L\$INA  | 000125   | #5-76                             |
| L\$IND  | 000126   | #5-76                             |
| L\$INI  | 000127   | #5-76                             |
| L\$LCT  | 000224   | #5-76                             |
| L\$LEN  | 000264   | #5-76                             |
| L\$LMB  | 000234   | #5-76                             |
| L\$LTM  | 000230   | #5-76                             |
| L\$MRT  | 000253   | #5-76                             |
| L\$MSG  | 000056   | #5-76                             |
| L\$MTYP | 000075   | #5-76                             |
| L\$MWN  | 000252   | #5-76                             |
| L\$MXB  | 000133   | #5-76                             |
| L\$MXR  | 000253   | #5-76                             |
| L\$MXW  | 000252   | #5-76                             |
| L\$NAM  | 000000   | #5-76                             |
| L\$NLEN | = 000020 | #5-76 5-76 5-76                   |
| L\$NMT  | 000116   | #5-76                             |
| L\$NTI  | 000256   | #5-76                             |
| L\$NTL  | 000134   | #5-76                             |
| L\$NUM  | 000240   | #5-76                             |
| L\$NUML | 000236   | #5-76                             |
| L\$NXT  | 000044   | #5-76                             |
| L\$OPT  | 000062   | #5-76                             |
| L\$OWN  | 000102   | #5-76                             |
| L\$PAR  | 000072   | #5-76 *6-101 *6-110 *7-189 *8-234 |
| L\$PDV  | 000055   | #5-76                             |

```

                                L$INT = 0          ; INTERNAL LOOPBACK
                                L$EXT = 1          ; EXTERNAL LOOPBACK
;
; MODEM TEST TYPE WORD BIT DEFINITIONS (L$MDT)
;
                                L$LCL = 0          ; LOCAL MODEM TEST
                                L$REM = 1          ; REMOTE MODEM TEST
                                L$OFF = 2          ; SHUT OFF MODEM TESTS
                                .ENDC ; DF R$PRO
;
; Flags word bit definitions for X.25 circuits and lines (L$FLX)
;
; Circuits:
000001      L$CHN = 1          ; Set PVC channel
000002      L$CMB = 2          ; Set maximum data
000004      L$CUS = 4          ; Set circuit usage
000010      L$DTE = 10         ; Set DTE
000020      L$MXR = 20         ; Set maximum recalls
000040      L$MXW = 40         ; Set maximum window
000100      L$NUM = 100        ; Set DLM number
000200      L$RET = 200        ; Set recall timer
001000      L$BLK = 1000       ; Set blocking
100000      L$NXC = 100000     ; Circuit is a new X.25 circuit
;
; Lines:
000400      L$HBT = 400        ; Set holdback timer
000002      L$LMB = L$CMB      ; Set max block
000020      L$MRT = L$MXR      ; Set max retransmits
000040      L$MWN = L$MXW      ; Set max window
000200      L$NTI = L$RET      ; Set retransmit timer
010000      L$PRO = 10000      ; Set line protocol
;
; Common:
020000      L$LCT = 20000      ; Set counter timer
;
; Groupings:
020053      L$PVC = L$CHN!L$CMB!L$DTE!L$MXW!L$LCT
000362      L$SVC = L$CMB!L$MXR!L$MXW!L$NUM!L$RET
001004      L$DLM = L$BLK!L$CUS

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.TITLE DACOU - READ/AND OR ZERO DA COUNTERS  
.IDENT /V05.00/  
.ENABL LC  
.NLIST END

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..MODULE DESCRIPTION:

..NETWORK MANAGEMENT - READ AND ZERO DA COUNTERS

..DISTRIBUTED SYSTEMS SOFTWARE ENGINEERING

..IDENT HISTORY:

..4.00 07-NOV-83  
..DECNET-11M V4.0  
..DECNET-11M-PLUS V2.0  
..5.00 22-JUL-85  
..DECnet-11M/S V4.2  
..DECnet-11M-Plus V3.0  
..DECnet-Micro/RX V1.0  
..

SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE      | REFERENCES |      |       |      |       |      |       |      |       |
|---------|------------|------------|------|-------|------|-------|------|-------|------|-------|
| T.RCV   | 000036     | #5-56      | 9-95 |       |      |       |      |       |      |       |
| T.RCVB  | 000042     | #5-56      | 9-93 |       |      |       |      |       |      |       |
| T.SP    | 000020     | #5-56      |      |       |      |       |      |       |      |       |
| T.TIME  | 000001     | #5-56      |      |       |      |       |      |       |      |       |
| T.TIMR  | 000000     | #5-56      |      |       |      |       |      |       |      |       |
| T.TLZ   | 000046     | #5-56      | 9-88 |       |      |       |      |       |      |       |
| T.VCT   | 177760     | #5-56      | 5-56 |       |      |       |      |       |      |       |
| T.XC    | 000016     | #5-56      |      |       |      |       |      |       |      |       |
| T.XMT   | 000026     | #5-56      | 9-96 |       |      |       |      |       |      |       |
| T.XMTB  | 000032     | #5-56      | 9-94 |       |      |       |      |       |      |       |
| T.XW    | 000012     | #5-56      |      |       |      |       |      |       |      |       |
| XPTCOU  | = ***** GX | 10-137     |      |       |      |       |      |       |      |       |
| \$\$BM  | = 000000   | #9-88      | 9-88 | #9-93 | 9-93 | #9-94 | 9-94 | #9-95 | 9-95 | #9-96 |
|         |            | 9-96       |      |       |      |       |      |       |      |       |
| \$\$REG | = 000000   | #9-88      | 9-88 | #9-93 | 9-93 | #9-94 | 9-94 | #9-95 | 9-95 | #9-96 |
|         |            | 9-96       |      |       |      |       |      |       |      |       |
| \$\$WID | = 060000   | #9-88      | 9-88 | #9-93 | 9-93 | #9-94 | 9-94 | #9-95 | 9-95 | #9-96 |
|         |            | 9-96       |      |       |      |       |      |       |      |       |



|     |        |        |               |       |        |                     |                                         |
|-----|--------|--------|---------------|-------|--------|---------------------|-----------------------------------------|
| 195 | 000452 | 122222 |               | 10\$: | CMPB   | (R2)+,(R2)+         | :: ELSE, RETURN STATION COUNTERS ONLY   |
| 196 | 000454 |        |               |       | SAVRG  | <R2>                | :: SAVE LINE-TYPE INDICATOR             |
| 197 | 000456 | 001002 |               |       | BNE    | 15\$                | :: IF NE, MULTIPOINT - USE CURRENT R2   |
| 198 | 000460 | 005202 |               |       | INC    | R2                  | :: ELSE, USE STATION TABLE TIME AS TIME |
| 199 | 000462 | 060002 |               |       | ADD    | R0,R2               | :: MAKE POINT TO POINT ADJUSTMENT       |
| 200 | 000464 | 016600 | 000002        | 15\$: | MOV    | 2(SP),R0            | :: GET DDCMP LINE TABLE ADDRESS         |
| 201 | 000470 |        |               |       | CALL   | FMTCOU              | :: GET THE TIME COUNTER                 |
| 202 | 000474 |        |               |       | RESRG  | <R2,R0>             | :: RESTORE BASE COUNTER INDICATOR       |
| 203 | 000500 | 005766 | 000010G       |       | TST    | 10+R5(SP)           | :: IS ENTITY = CIRCUIT ?                |
| 204 | 000504 | 100404 |               |       | BMI    | 16\$                | :: IF MI, YES - INCLUDE XPT COUNTERS    |
| 205 | 000506 | 032764 | 000010 000064 |       | BIT    | #LF\$VR2,L\$FLG(R4) | :: ELSE IS IT NICE V2.0 LINE ?          |
| 206 | 000514 | 001402 |               |       | BEQ    | 17\$                | :: NO - SKIP TRANSPORT COUNTERS         |
| 207 | 000516 |        |               | 16\$: | CALL   | XPTCOU              | :: GET CIRCUIT COUNTERS                 |
| 208 | 000522 | 012605 |               | 17\$: | MOV    | (SP)+,R5            | :: PICK UP SECOND TABLE ADDRESS         |
| 209 | 000524 |        |               |       | CALL   | FMTCOU              | :: FORMAT THE COUNTERS                  |
| 210 | 000530 | 012667 | 177460        | 20\$: | MOV    | (SP)+,DCPLN1        | :: RESTORE TABLES TO                    |
| 211 | 000534 | 012667 | 177244        |       | MOV    | (SP)+,DCPLN0        | :: THEIR VIRGIN STATE                   |
| 212 | 000540 |        |               | 25\$: | RESMAP |                     | :: RESTORE PREVIOUS MAPPING             |
| 213 | 000544 | 010366 | 000000G       |       | MOV    | R3,R\$R3(SP)        | :: RETURN R3 IN SAVED R3                |
| 214 | 000550 |        |               | 30\$: | RETURN |                     | :: BACK TO USER STATE AND RETURN        |
| 215 |        |        |               |       |        |                     |                                         |
| 216 |        | 000001 |               |       | .END   |                     |                                         |

Symbol table

|                  |                |                  |                  |                   |
|------------------|----------------|------------------|------------------|-------------------|
| A\$\$CHK= 000000 | H.CSP 000000   | H.ODVL 000024    | L\$\$P11= 000001 | R\$\$K11= 000001  |
| A\$\$CPS= 000000 | H.CUIC 000010  | H.OVLY 000054    | L\$\$11R= 000000 | R\$\$SND= 000000  |
| A\$\$PRI= 000000 | H.DSW 000046   | H.PFVA 000032    | M\$\$CRB= 000124 | R\$\$11M= 000000  |
| A\$\$TRP= 000000 | H.DUIC 000012  | H.RCVA 000036    | M\$\$CRX= 000000 | S\$\$WRG= 000000  |
| C\$\$CKP= 000000 | H.EFLM 000004  | H.RRVA 000062    | M\$\$FCS= 000000 | S\$\$YSZ= 007600  |
| C\$\$ORE= 000400 | H.EFSV 000040  | H.SPRI 000060    | M\$\$MGE= 000000 | T\$\$KMG= 000000  |
| C\$\$RSH= 177564 | H.FCS 000050   | H.TKVA 000026    | M\$\$NET= 000000 | T\$\$MIN= 000000  |
| DEALUN 000000RG  | H.FORT 000052  | H.TKVL 000030    | M\$\$QVR= 000000 | Y\$\$CTR= 001000  |
| D\$\$BUG= 177514 | H.FPSA 000042  | H.VEXT 000056    | N\$\$ACC= 000001 | W.BATT 000006     |
| D\$\$ISK= 000000 | H.FPSL= 000062 | H.WND 000044     | N\$\$BUF= 000001 | W.BFPD 000014     |
| D\$\$L11= 000001 | H.FPVA 000034  | H.X25 000064     | N\$\$LDV= 000001 | W.BHVR 000004     |
| D\$\$YNC= 000000 | H.GARD 000072  | I\$\$RAR= 000000 | N\$\$MCP= 000001 | W.BLGH 000020     |
| D\$\$YNM= 000000 | H.HDLN 000002  | I\$\$RDN= 000000 | N\$\$MLL= 000001 | W.BLPD 000016     |
| E\$\$XPR= 000000 | H.IPC 000016   | K\$\$CNT= 177546 | N\$\$MOV= 000010 | W.BLVR 000002     |
| F\$\$LVL= 000001 | H.IPS 000014   | K\$\$CSR= 177546 | N\$\$NCT= 000001 | W.BNPD 000015     |
| G\$\$TPP= 000000 | H.ISP 000020   | K\$\$LDC= 000000 | N\$\$PEM= 000001 | W.BOFF 000012     |
| G\$\$TSS= 000000 | H.LUN 000076   | K\$\$TPS= 000074 | P\$\$P45= 000000 | W.BPCB 000000     |
| G\$\$TTK= 000000 | H.NLUN 000074  | LD\$LP = 000000  | P\$\$WRD= 000000 | W.BSIZ 000010     |
| G\$\$WRD= 000000 | H.NML 000061   | L\$\$ASG= 000000 | Q\$\$OPT= 000010 | X\$\$DBT= 000000  |
| HEADR = ***** GX | H.ODVA 000022  | L\$\$DRV= 000000 | R\$\$DER= 000000 | \$TMLUN= ***** GX |

. ABS. 000102 000 (RW,I,GBL,ABS,OVR)

000016 001 (RW,I,LCL,REL,CON)

Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 0

Work file writes: 0

Size of work file: 9585 Words ( 38 Pages)

Size of core pool: 14440 Words ( 55 Pages)

Operating system: RSX-11M/PLUS

Elapsed time: 00:00:06.44

SY:DEALUN.V2,[135,134]DEALUN/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DEALUN

```

202 .SBTTL RQSTCO - Request counters from DLC process
203
204 *** RQSTCO - Request counters from DLC process
205
206 Inputs:
207 R4 = Context pointer
208
209 Output:
210 Carry clear:
211 R4 = Context pointer
212 R5 = CCB address
213
214 Carry set:
215 R0 = Return code
216
217
218 RQSTCO:
219 SWSTK$ 50$ :: Enter system state
220 MOV R4,R5 :: Save address of context area
221
222 ; Allocate an LDB and set up line parameters
223
224 CALL @LDBGT :: Try to allocate an LDB ; RJK01
225 MOV #ME.RES,R0 :: Assume resource allocation failure
226 BCS 40$ :: If CS, allocation failure
227 MOV CURTX,C.NSP(R4) :: Save context address in CCB
228 MOV R4,R$R5(SP) :: Save CCB address in saved user R5
229 MOV R1,C.LIN(R4) :: Pick up channel number
230 MOV R1,C.LIN(R4) :: Stuff it into CCB
231 MOV L$PDV(R5),R0 :: Pick up LLC process PDV index
232 ADD @PDVTA,R0 :: Point to address of LLC PDV ; RJK01
233 MOV (R0),R0 :: Point to LLC PDV
234 R1 :: Make channel # a word index
235 ADD R1,R0 :: Add it in
236 MOV Z.MAP(R0),C.CNT2(R4) :: Get SLN and trib for DLC
237 MOV L$SLT(R5),R0 :: Get our SLT address
238 MOV L.DLC(R0),C.STA(R4) :: Get PDV index of DLC for line
239
240 .IF DF R$$MPL
241
242 TSTB @NCPU :: multi-processor configuration ?
243 BEQ 5$ :: if EQ, no
244 MOV L.KRBA(R0),R0 :: else point to KRB.
245 MOV K.URM(R0),C.URM(R4) :: initialize Unibus run mask
246
247 .ENDC ; DF R$$MPL
248
249 ; Set function and subfunction, entity, return task name and queue LDB
250
251 5$: CLR -(SP) :: No function code yet
252 BIT #LF$REA,L$FLG(R5) :: Requested read ?
253 BEQ 10$ :: If EQ, no
254 BIS #FC.MAN!FS.REA,(SP) :: Else set up function, subfunction
255 BIT #LF$ZER,L$FLG(R5) :: Requested zero ?
256 BEQ 20$ :: If EQ, no
257 BIS #FC.MAN!FS.ZER,(SP) :: Else set up function, subfunction
258 20$: MOV #ME.MPR,R0 :: Should never happen, but ...

```

DLCCOU      CREATED BY    MACRO    ON 29-JUN-85 AT 12:22      PAGE 6      L 12

MACRO CROSS REFERENCE      CREF    04.00

| MACRO NAME | REFERENCES                                                                                              |
|------------|---------------------------------------------------------------------------------------------------------|
| BIAS       | #5-52      8-141      8-145      8-148      10-301                                                      |
| CALL       | 8-97      8-100      8-102      8-114      8-128      8-163      8-167      8-179      8-198      9-219 |
| CALLR      | 9-224      11-330      11-349                                                                           |
| CCBDF\$    | 9-274                                                                                                   |
| CIRCX\$    | #5-51      5-54                                                                                         |
| MANDF\$    | #5-52      6-62                                                                                         |
| MAP        | #5-51      5-56                                                                                         |
| PDVDF\$    | #5-51      8-134      10-299                                                                            |
| RESMAP     | #5-51      5-55                                                                                         |
| RESRG      | #5-52      8-169      10-305                                                                            |
| RETC       | #5-52      8-164      8-168      10-304      11-351      11-360                                         |
| RETURN     | #5-51      8-193      9-279                                                                             |
| SAVMAP     | 8-199      9-280      10-306      11-361                                                                |
| SAVRG      | #5-52      8-120      10-297                                                                            |
| SLTDF\$    | #5-52      8-143      8-162      10-298      11-325      11-344                                         |
| SOB        | #5-51      5-57                                                                                         |
| SWSTK\$    | 10-303      11-347      11-358                                                                          |
|            | 8-102      9-219                                                                                        |

|                  |                 |                 |                |                |
|------------------|-----------------|-----------------|----------------|----------------|
| ASCIMG= 000100   | K\$SLDC= 000000 | L\$DDM 000000   | MB\$ZER 000000 | MC\$RFL 002046 |
| A\$SCHK= 000000  | K\$STPS= 000074 | L\$FLG 000064   | MC\$BAB 006073 | MC\$SBU 002051 |
| A\$SCPS= 000000  | LC\$EXT 000000  | L\$FLX 000070   | MC\$BID 001765 | MC\$SFL 002044 |
| A\$SPRI= 000000  | LC\$INT 000001  | L\$LEN 000124   | MC\$BMC 001767 | MC\$SYC 000012 |
| A\$STRP= 000000  | LD\$LP = 000000 | L\$LTM 000070   | MC\$BSC 001766 | MC\$SYL 000036 |
| BIT0 = 000001    | LF\$END= 000020 | L\$MSG 000056   | MC\$CAC 001442 | MC\$SYR 000050 |
| BIT1 = 000002    | LF\$MLT= 040000 | L\$MTYP 000067  | MC\$CAP 001440 | MC\$SYS 000024 |
| BIT10 = 002000   | LF\$REA= 000001 | L\$NAM 000000   | MC\$CCL 001445 | MC\$SYZ 000000 |
| BIT11 = 004000   | LF\$SEG= 100000 | L\$NLEN= 000020 | MC\$CDL 002045 | MC\$TBR 001140 |
| BIT12 = 010000   | LF\$SIG= 000040 | L\$NOD 000112   | MC\$CDP 001441 | MC\$TBS 001141 |
| BIT13 = 020000   | LF\$SKP= 000004 | L\$NXT 000044   | MC\$CIF 001465 | MC\$TDR 002053 |
| BIT14 = 040000   | LF\$VR2= 000010 | L\$OPT 000062   | MC\$CLD 001464 | MC\$TIM 000000 |
| BIT15 = 100000   | LF\$ZER= 000002 | L\$PAR 000120   | MC\$COU 100000 | MC\$TYP 007777 |
| BIT2 = 000004    | LF\$ACT= 100000 | L\$PDV 000055   | MC\$CTL 001454 | MC\$UBU 002052 |
| BIT3 = 000010    | LF\$BRO= 000400 | L\$PGF 000041   | MC\$CTR 001452 | MC\$UFD 002047 |
| BIT4 = 000020    | LF\$BWT= 000007 | L\$PLB 000116   | MC\$CTS 001453 | MC\$UMR 001132 |
| BIT5 = 000040    | LF\$ENA= 002000 | L\$PRD 000067   | MC\$DOV 002050 | MC\$UMS 001133 |
| BIT6 = 000100    | LF\$LPB= 001000 | L\$PVC 000004   | MC\$LBR 001750 | MC\$VAX 000003 |
| BIT7 = 000200    | LF\$MDC= 000100 | L\$SCN 000020   | MC\$LBS 001751 | MC\$WID 060000 |
| BIT8 = 000400    | LF\$MFI= 004000 | L\$SCR 000072   | MC\$LDI 001774 | MC\$WIH 040000 |
| BIT9 = 001000    | LF\$MTP= 000020 | L\$SLN 000066   | MC\$LDO 001775 | MC\$WIL 020000 |
| BS10 000003      | LF\$PAC= 000200 | L\$SLT 000042   | MC\$LDR 001762 | MC\$WOB 020000 |
| BS11 000004      | LF\$RDY= 040000 | L\$SNM 000046   | MC\$LDS 001763 | MC\$W16 040000 |
| BS12 000005      | LF\$REA= 010000 | L\$SYL 000122   | MC\$LLB 002021 | MC\$W32 060000 |
| BS5 000000       | LF\$SER= 000040 | L\$TNM 000052   | MC\$LLP 002115 | MC\$XBR 001750 |
| BS6 000001       | LF\$TIM= 000010 | L\$TPT 000050   | MC\$LLR 002007 | MC\$XBS 001751 |
| BS7 000002       | LF\$UNL= 020000 | L\$TRB 000040   | MC\$LLD 000001 | MC\$XCJ 000322 |
| BS7S10 000006    | LF\$X2P= 000000 | L\$TSZ 000070   | MC\$LRB 002020 | MC\$XCR 002260 |
| CDDMUL= 000300   | LN\$CLO= 000000 | L\$TYP 000063   | MC\$LRP 002114 | MC\$XCS 002261 |
| CDD\$NG= 000200  | LN\$DUM= 000005 | L\$UNT 000003   | MC\$LRR 002006 | MC\$XDR 001762 |
| C\$CKP= 000000   | LN\$LOA= 000004 | L\$ASG= 000000  | MC\$LSI 002032 | MC\$XDS 001763 |
| C\$ORE= 000400   | LN\$LDO= 000003 | L\$DRV= 000000  | MC\$LST 002033 | MC\$XFR 002272 |
| C\$RSH= 177564   | LN\$OAU= 000003 | L\$SP11= 000001 | MC\$LUP 006072 | MC\$XFS 002273 |
| DECSIG= 000020   | LN\$OFF= 000001 | L\$11R= 000000  | MC\$MAP 010000 | MC\$XLJ 000323 |
| DECUNS= 000000   | LN\$ON = 000000 | L\$COST 000015  | MC\$MBL 001764 | MC\$XLR 002330 |
| DLMCOU 000006RG  | LN\$ODP= 000004 | L\$CTL 000012   | MC\$MBX 004420 | MC\$XMA 000310 |
| DLMTBO 000000R   | LN\$OPE= 000001 | L\$CVA 177776   | MC\$MBY 001752 | MC\$XMC 002305 |
| D\$BUG= 177514   | LN\$REF= 000002 | L\$DDM 000002   | MC\$MPX 004406 | MC\$XMS 002304 |
| D\$ISK= 000000   | LN\$SER= 000002 | L\$DDS 000004   | MC\$NAP 001604 | MC\$XNR 002332 |
| D\$SL11= 000001  | LN\$STA= 000017 | L\$DLC 000003   | MC\$NBR 001130 | MC\$XRC 002316 |
| D\$SYNC= 000000  | LN\$SUB= 000360 | L\$DLM 000006   | MC\$NBS 001131 | MC\$XRR 002331 |
| D\$SYNM= 000000  | LN\$TRI= 000006 | L\$DLS 000010   | MC\$NCR 001154 | MC\$XRS 002342 |
| E\$XPR= 000000   | LP\$MPT= 000010 | L\$FLG 000000   | MC\$NCS 001155 | MC\$O20 000002 |
| FMTCOU= ***** GX | LP\$MUX= 000004 | L\$KRA 000016   | MC\$NML 001274 | MD\$CI 000007  |
| FNDDL 000062R    | LP\$TRB= 000002 | L\$LEN = 000022 | MC\$NMR 001142 | MD\$CNA 000003 |
| F\$SLVL= 000001  | LP\$UNT= 000001 | L\$MPF 000022   | MC\$NMS 001143 | MD\$CDU 000001 |
| G\$STPP= 000000  | LP\$WCN= 000040 | L\$NMST 000020  | MC\$NNO 001606 | MD\$DA 000010  |
| G\$STSS= 000000  | LP\$WDV= 000020 | L\$NSTA 000014  | MC\$NNU 001605 | MD\$DL 000004  |
| G\$STTK= 000000  | LP\$WLD= 000360 | L\$DWR 000021   | MC\$NOP 001607 | MD\$DLV 000020 |
| G\$SWRD= 000000  | LP\$WTR= 000200 | L\$UNT 000013   | MC\$NOR 000000 | MD\$DMC 000014 |
| HEX = 000040     | LP\$WUN= 000100 | MB\$DLS 000001  | MC\$NPF 001616 | MD\$DMF 000046 |
| HEXIMG= 177777   | L\$ADJ 000110   | MB\$ENA 000000  | MC\$NPR 001630 | MD\$DMP 000022 |
| I\$SRAR= 000000  | L\$BUF 000060   | MB\$FUL 000002  | MC\$NRE 001200 | MD\$DMR 000050 |
| I\$SRDN= 000000  | L\$CHN 000054   | MB\$MIX 000002  | MC\$NRT 001166 | MD\$DMV 000042 |
| KISAR6= ***** GX | L\$COU 000114   | MB\$ONE 000001  | MC\$NVR 001642 | MD\$DN 000016  |
| K\$CNT= 177546   | L\$CTB 000053   | MB\$RXO 000001  | MC\$PO8 000000 | MD\$DP 000000  |
| K\$CSR= 177546   | L\$CTL 000002   | MB\$TXO 000000  | MC\$P11 000001 | MD\$DPV 000044 |

70  
71  
72  
73  
74  
75 000004

.SBTTL CONTEXT AREA OFFSET DEFINITIONS

CONTEXT AREA OFFSET DEFINITIONS

CICCX\$ LIST

CONTEXT AREA OFFSET DEFINITIONS

000000  
000000  
000020

.ASECT  
= 0  
L\$NLEN = 16. ; MAXIMUM NAME LENGTH

The offsets L\$NAM to L\$PDV inclusive must appear in the same order  
as in the CIRCX\$ and LOCCX\$ macros.

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L\$NAM: ; DEVICE NAME  
L\$DDM: .BLKW 1 ; CONTROLLER NUMBER  
L\$CTL: .BLKB 1 ; UNIT NUMBER  
L\$UN: .BLKB 1 ; 3RD WORD OF PVC NAME  
L\$PVC: .BLKW 1 ; FOR EXPANDED CIRCUIT NAME  
; = 0+L\$NLEN ; SPACE FOR EXPANDED CIRCUIT NAME  
L\$SCN: .BLKB L\$NLEN ; CURRENT NAME IN WILDCARD SCAN  
L\$TRB: .BLKB 1 ; TRIBUTARY NUMBER  
L\$SPFG: .BLKB 1 ; PARSE FLAGS  
L\$SLT: .BLKW 1 ; Current SLT/PVC address  
L\$NXT: .BLKW 1 ; Pointer to next SLT/PVC address  
L\$SNM: .BLKW 1 ; REMAINING NUMBER OF SYSTEM LINES  
L\$TPT: .BLKW 1 ; Current tributary pointer (-1 for PSI)  
L\$TNM: .BLKB 1 ; REMAINING NUMBER OF TRIBUTARIES  
L\$CTB: .BLKB 1 ; CURRENT TRIBUTARY NUMBER  
L\$CHN: .BLKB 1 ; Channel number / X.25 port number and  
L\$PDV: .BLKB 1 ; ... PDV assigned  
L\$MSG: .BLKW 1 ; ERROR MESSAGE STRING POINTER  
L\$BUF: .BLKW 1 ; SAVED BUFFER POINTER  
L\$OPT: .BLKB 1 ; SAVED OPTIONS BYTE  
L\$TYP: .BLKB 1 ; CIRCUIT-ID FORMAT TYPE  
L\$FLG: .BLKW 1 ; FLAG WORD (FOR COMMAND)  
L\$FL1: .BLKW 1 ; FLAG WORD (FOR COMMAND)  
L\$FL2: .BLKW 1 ; FLAG WORD (FOR CURRENT CIRCUIT)  
L\$PAR: .BLKW 1 ; CURRENT PARAMETER TYPE  
L\$SLEN: .BLKB 1 ; Significant length of circuit name  
L\$PRO: ; Line protocol  
L\$MTYP: .BLKB 1 ; Network management circuit type  
L\$FLX: .BLKW 1 ; Flags word for X.25 circuit commands  
L\$STA: .BLKB 1 ; CIRCUIT STATE  
L\$COS: .BLKB 1 ; CIRCUIT COST  
L\$OWN: .BLKB 1 ; CIRCUIT OWNER (PDV INDEX)  
L\$TAD: .BLKB 1 ; TRIBUTARY ADDRESS  
L\$ACT: .BLKB 1 ; MULTIPPOINT ACTIVE RATIO  
L\$DEA: .BLKB 1 ; MULTIPPOINT DEAD RATIO  
L\$DDT: .BLKW 1 ; DMP DEAD TIMER  
L\$DLT: .BLKW 1 ; DMP DELAY TIMER  
L\$PLT: .BLKW 1 ; DMP POLL TIMER  
L\$BBT: .BLKW 1 ; DMP BABBLE TIMER  
L\$NMT: .BLKW 1 ; DMP NORMAL TIMER  
L\$XMT: .BLKW 1 ; DMP TRANSMIT TIMER

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## SYMBOL CROSS REFERENCE

CREF 04.00

| SYMBOL    | VALUE      | REFERENCES                                                |
|-----------|------------|-----------------------------------------------------------|
| \$SAVAL   | = ***** GX | 8-111                                                     |
| \$TMEFN   | = ***** GX | 8-149                                                     |
| \$TMLUN   | = ***** GX | 8-149                                                     |
| \$\$\$ARG | = 000002   | 8-149 9-203 9-206                                         |
|           |            | #8-149 8-149 #8-149 8-149 #8-149 8-149 #8-149 8-149 8-149 |
|           |            | #8-149 8-149 8-149 8-149 8-149 8-149 8-149 8-149 8-149    |
|           |            | 8-149 8-149 #8-149 8-149 8-149 8-149 8-149 8-149 8-149    |
|           |            | 8-149 8-149 8-149 8-149 #8-149 8-149 8-149 8-149 8-149    |
|           |            | 8-149 8-149 8-149 8-149 8-149 8-149 8-149 8-149 8-149     |

DLXAST - ISSUE I/O TO DLX AND W MACRO V05.03b Saturday 29-Jun-85 12:23 Page 10  
DLXLUN - ASSIGN A LUN TO NX:

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000232 103415  
000234 062704 000166  
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000254 103404  
000256 105764 000003  
000262 100401  
000264 000261  
000266  
000270  
  
000001

```

.SBTTL DLXLUN - ASSIGN A LUN TO NX:
+
**--DLXLUN--ASSIGN A LUN TO NX:
THIS ROUTINE IS CALLED TO ASSIGN $TMLUN TO NX:.
OUTPUTS:
  IF CC, NX: IS LOADED AND ALUN SUCCEEDED.
  ELSE, NX: NOT PRESENT
REGISTERS:
  NO REGISTERS MODIFIED
-
DLXLUN::
  SAVRG <R4>          ; SAVE R4
  CALL DEALUN          ; DEASSIGN THE TEMPORARY LUN
  ALUN$$ #$TMLUN, #'NX ; TRY TO ASSIGN A LUN TO NX:
  BCS 10$              ; IF CS, NOT THERE
  ADD #L$SCR, R4       ; POINT TO SCRATCH BUFFER
  GLUN$$ #$TMLUN, R4   ; GET LUN INFORMATION
  BCS 10$              ; IF CS, ASSUME NO DLX
  TSTB 3(R4)           ; IS THE DRIVER LOADED ?
  BMI 10$              ; IF MI, YES
  SEC                 ; ELSE, NO
10$: RESRG <R4>       ; RESTORE R4
  RETURN
.END

```



CIREOP - CIRCUIT READ INFORMATION MACRO V05.03b Saturday 29-Jun-85 12:18 Page 8-4  
Symbol table

|                |                |                |              |                    |
|----------------|----------------|----------------|--------------|--------------------|
| ZF.MAN= 020000 | ZF.SLI= 010000 | Z.AVL 000014   | Z.LLN 000006 | Z.SCH 000007       |
| ZF.MFL= 000010 | ZF.TIM= 000200 | Z.DAT 000016   | Z.MAP 000020 | \$\$AVRG= ***** GX |
| ZF.MTM= 000400 | ZF.XSP= 000000 | Z.DSP 000000   | Z.NAM 000004 | \$\$\$SYS= 004374  |
| ZF.MUX= 000040 | ZS.ASN= 100000 | Z.FLG 000010   | Z.PCB 000012 | \$\$\$SYX= 000000  |
| ZF.PSE= 002000 | ZS.BSY= 140000 | Z.LEN = 000016 |              |                    |

. ABS. 177776 000 (RW,I,GBL,ABS,OVR)  
000364 001 (RW,I,LCL,REL,CON)  
Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 225  
Work file writes: 150  
Size of work file: 29995 Words ( 118 Pages)  
Size of core pool: 17608 Words ( 67 Pages)  
Operating system: RSX-11M/PLUS

Elapsed time: 00:00:26.52  
SY:CIREOP.V2,[135,134]CIREOP/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]CIREOP

```

250 000436 016164 000030 000114      MOV    D$NLN(R1),L$COU(R4)      ; get number of channels...;**-1
251 000444 012764 140000 000110      MOV    #140000,L$ADJ(R4)      ; scan channel-indexed adjacencies
252 000452 005001                CLR    R1                      ; assume no node
253 000454                CALL   GETADJ      ; get adjacent node
254 000460 103002                BCC    66$                    ; if CC, adjacency is up
255 000462 000167 000146          JMP    95$                    ; if CS, none
256 000466 016401 000112 66$:      MOV    L$NOD(R4),R1      ; else pick up node address
257 000472 016467 000070 177350      MOV    L$TSZ(R4),TEMP      ; and transport block size
258 000500 000451                BR     85$                    ; stuff it in response
259
260                ; Get adjacent node: Ethernet circuit, routing node
261                ; Initialize adjacency scan
262
263 264 000502 017701 000000G 67$:      MOV    @DECPT,R1      ; initialize count: ; RJK05
265 000506 016164 000054 000114      MOV    D$NBRA(R1),L$COU(R4) ; broadcast router adjacencies...;**-1
266 000514 066164 000056 000114      ADD    D$NBEA(R1),L$COU(R4) ; plus broadcast endnode adjacencies
267 000522 016101 000030          MOV    D$NLN(R1),R1      ; get number of channels..
268 000526                ASL$    2,R1      ; ..times adjacency size
269 000532                BIAS    R1      ; skip channel-indexed adjacencies
270 000542 010164 000110          MOV    R1,L$ADJ(R4)      ; save start address of adj scan
271 000546                CALL   GETADJ      ; get the first adjacency
272 000552 103430                BCS    95$                    ; if CS, there ain't none !
273
274                ; Get adjacent node: Ethernet circuit, routing node
275                ; Get next adjacency
276
277 278 000554 042764 100000 000064 70$:      BIC    #LF$SEG,L$FLG(R4)      ; assume last adjacency is sequence
279 000562 016401 000112          MOV    L$NOD(R4),R1      ; pick up current node id
280 000566 016467 000070 177254      MOV    L$TSZ(R4),TEMP      ; ...and transport block size
281 000574                CALL   GETADJ      ; get next adjacency
282 000600 103411                BCS    85$                    ; if CS, this was the last
283 000602 052764 100000 000064      BIS    #LF$SEG,L$FLG(R4)      ; else remember partial response
284 000610 112774 000003 000060      MOVVB  #MS.PAR,@L$BUF(R4)      ; set return code to partial
285 000616 000402                BR     85$                    ; process node address
286
287                ; Get adjacent node: All circuits, endnode
288 000620 75$:      CALL   GETADE      ; Get adjacent node (endnode)
289
290                ; Build adjacent node and block size parameters
291
292 293 000624 005701 85$:      TST    R1                      ; WAS THERE AN ADJACENT NODE ?
294 000626 001402          BEQ    95$                    ; IF EQ, THERE WAS NONE
295 000630                CALL   PUTNOD      ; output node id and block size
296
297 298 000634 95$:      RETURN
299
300                .IF DF R$S11S
                .PSECT
                .ENDC

```

CIREST - READ CIRCUIT STATUS    MACRO V05.03b Thursday 25-Jul-85 15:35 <sup>M 3</sup> Page 13-6  
Symbol table

Errors detected: 0

\*\*\* Assembler statistics

work file reads: 262  
work file writes: 186  
Size of work file: 37859 Words ( 148 Pages)  
Size of core pool: 17608 Words ( 67 Pages)  
Operating system: RSX-11M/PLUS

Elapsed time: 00:00:55.48  
DB2:CIREST.T66,[135,134]CIREST/CR/-SP=DB2:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]CIREST

```

010000      LS$HTM=10000      ; SET HELLO TIMER
020000      LS$MDT=20000      ; SET MODEM TEST
040000      LS$LLO=40000      ; SET CONTROLLER LOOPBACK
100000      LS$NOR=100000     ; SET CONTROLLER NORMAL
              .IF DF R$$PRO ; PRO/DECNET

; LOOPBACK TYPE WORD BIT DEFINITIONS (L$LTY)
;
; LS$INT = 0      ; INTERNAL LOOPBACK
; LS$EXT = 1      ; EXTERNAL LOOPBACK

; MODEM TEST TYPE WORD BIT DEFINITIONS (L$MDT)
;
; LS$LCL = 0      ; LOCAL MODEM TEST
; LS$REM = 1      ; REMOTE MODEM TEST
; LS$OFF = 2      ; SHUT OFF MODEM TESTS
; .ENDC ; DF R$$PRO

; Flags word bit definitions for X.25 circuits and lines (L$FLX)
;
; Circuits:
; LS$CHN = 1      ; Set PVC channel
; LS$CMB = 2      ; Set maximum data
; LS$CUS = 4      ; Set circuit usage
; LS$DTE = 10     ; Set DTE
; LS$MXR = 20     ; Set maximum recalls
; LS$MXW = 40     ; Set maximum window
; LS$NUM = 100    ; Set DLM number
; LS$RET = 200    ; Set recall timer
; LS$BLK = 1000   ; Set blocking
; LP$NXC = 100000 ; Circuit is a new X.25 circuit

; Lines:
; LS$HBT = 400    ; Set holdback timer
; LS$LMB = LS$CMB ; Set max block
; LS$MRT = LS$MXR ; Set max retransmits
; LS$MWN = LS$MXW ; Set max window
; LS$NTI = LS$RET ; Set retransmit timer
; LS$PRO = 10000  ; Set line protocol

; Common:
; LS$LCT = 20000  ; Set counter timer

; Groupings:
; LS$PVC = LS$CHN!LS$CMB!LS$DTE!LS$MXW!LS$LCT
; LS$SVC = LS$CMB!LS$MXR!LS$MXW!LS$NUM!LS$RET
; LS$DLM = LS$BLK!LS$CUS

; .IF NDF S$$BAS & R$$RTR

```

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## SYMBOL CROSS REFERENCE CREF 04.00

| SYMBOL  | VALUE    | REFERENCES                                            |
|---------|----------|-------------------------------------------------------|
| L\$PFG  | 000041   | #5-76 7-172 8-215 8-217                               |
| L\$PLT  | 000112   | #5-76                                                 |
| L\$PRO  | 000075   | #5-76                                                 |
| L\$PVC  | 000004   | #5-76                                                 |
| L\$RET  | 000256   | #5-76                                                 |
| L\$SCN  | 000020   | #5-76                                                 |
| L\$SCR  | 000166   | #5-76                                                 |
| L\$SER  | 000230   | #5-76                                                 |
| L\$LEN  | 000074   | #5-76                                                 |
| L\$SLT  | 000042   | #5-76 6-104                                           |
| L\$SNM  | 000046   | #5-76                                                 |
| L\$STA  | 000100   | #5-76                                                 |
| L\$TAD  | 000103   | #5-76 6-131 6-135 6-143                               |
| L\$TH1  | 000130   | #5-76                                                 |
| L\$TH2  | 000131   | #5-76                                                 |
| L\$TH3  | 000132   | #5-76                                                 |
| L\$TNM  | 000052   | #5-76                                                 |
| L\$TPT  | 000050   | #5-76 6-102 6-116 7-170 8-213                         |
| L\$TRB  | 000040   | #5-76                                                 |
| L\$TYP  | 000063   | #5-76                                                 |
| L\$UNT  | 000003   | #5-76                                                 |
| L\$XCH  | 000232   | #5-76                                                 |
| L\$XMT  | 000120   | #5-76                                                 |
| L.COST  | 000015   | #5-64                                                 |
| L.CTL   | 000012   | #5-64                                                 |
| L.CVA   | 177776   | #5-64                                                 |
| L.DDM   | 000002   | #5-64                                                 |
| L.DDS   | 000004   | #5-64                                                 |
| L.DLC   | 000003   | #5-64                                                 |
| L.DLM   | 000006   | #5-64                                                 |
| L.DLS   | 000010   | #5-64                                                 |
| L.FLG   | 000000   | #5-64 6-105 6-113                                     |
| L.KRBA  | 000016   | #5-64                                                 |
| L.LEN   | = 000022 | #5-64                                                 |
| L.MPF   | 000022   | #5-64                                                 |
| L.NMST  | 000020   | #5-64                                                 |
| L.NSTA  | 000014   | #5-64 6-111                                           |
| L.O4NR  | 000021   | #5-64                                                 |
| L.PLD   | 000047   | *8-227                                                |
| L.UNT   | 000013   | #5-64                                                 |
| ME\$LIN | 000001   | 6-110                                                 |
| ME.CST  | 177765   | 6-109                                                 |
| ME.IID  | 177767   | 7-187 8-232                                           |
| ME.PNA  | 177752   | 6-100 7-190 8-235                                     |
| MP\$MAC | 004420   | 7-189                                                 |
| MP\$MDE | 004421   | 8-234                                                 |
| MP\$TRI | 002164   | 6-101                                                 |
| M\$SMGE | = 000000 | 5-66                                                  |
| N\$SVCT | = *****  | 6-121 6-141 6-144 7-176 7-180 7-183 8-221 8-225 8-228 |
| RBIA\$  | = 000002 | #5-70 *6-140 *7-179 *8-224                            |
| RX.NXM  | = 000020 | #5-66                                                 |
| R\$.OVR | = 000010 | #5-66                                                 |

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 101 000004 012705 000002  
 102 000010 122700 000000  
 103 000014 001410  
 104 000016 052705 000001  
 105 000022 122700 000200  
 106 000026 001403  
 107 000030 012700 177777  
 108 000034 000442  
 109 000036 012700 000060  
 110 000042 110064 000062  
 111 000046 010364 000060  
 112 000052 010564 000064  
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 116 000056 012700 177773  
 117 000062 026427 177776 000264  
 118 000070 002422  
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 122 000072 010400  
 123 000074 012705 000026  
 124 000100 005020  
 125 000102  
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```
.SBTTL CIZEIN - CIRCUIT ZERO COUNTERS INITIALIZE
+
**CIZEIN-CIRCUIT ZERO COUNTERS INITIALIZE ROUTINE
:
: THIS ROUTINE IS CALLED TO INITIALIZE FOR THE CIRCUIT ZERO COUNTERS
: OPERATION. ZERO COUNTERS IS HANDLED AS A SPECIAL CASE OF READ
: COUNTERS.
:
: INPUTS:
: R0 = OPTION (ZERO OR READ AND ZERO)
: R1 = ID ADDRESS (LINE FORMAT)
: R2 = LENGTH OF DATA IN INPUT BUFFER (ZERO)
: R3 = ADDRESS OF INPUT BUFFER
: R4 = ADDRESS OF CONTEXT AREA
:
: OUTPUTS:
: R0 = RETURN CODE
: R2 = LENGTH OF DATA IN OUTPUT BUFFER
: R3 = ADDRESS OF OUTPUT BUFFER
: DATA SAVED IN CONTEXT AREA
: C-BIT = CLEAR IF SUCCESS, SET IF FAILURE
:
: REGISTERS:
: R3, R4, R5 ARE PRESERVED
:
CIZEIN::
:
: CHECK OPTION AND MAKE IT LOOK LIKE A READ COUNTERS OPERATIONS
:
: JSR R5,$SAVRG ; SAVE R3-R5
: MOV #L$ZER,R5 ; ASSUME OPERATION IS ZERO COUNTERS
: CMPB #M0$ZER,R0 ; IS IT JUST A ZERO COUNTERS OPERATION ?
: BEQ 10$ ; IF EQ, YES
: BIS #L$REA,R5 ; ELSE, ASSUME IT IS A READ AND ZERO ?
: CMPB #M0$REA,R0 ; IS IT A READ AND ZERO ?
: BEQ 10$ ; IF EQ, YES
: MOV #ME$FUN,R0 ; ELSE, SAY ILLEGAL OPTION
: BR 50$ ; AND RETURN WITH ERROR
10$: MOV #M0$COU,R0 ; MAKE ZERO LOOK LIKE A READ COUNTERS
: MOVB R0,L$OPT(R4) ; SAVE OPTION BYTE
: MOV R3,L$BUF(R4) ; SAVE BUFFER POINTER
: MOV R5,L$FLG(R4) ; SAVE OPERATION INDICATOR
:
: CHECK LENGTH OF CONTEXT AREA
:
: MOV #ME$MPR,R0 ; ASSUME CONTEXT AREA TOO SMALL
: CMP ~2(R4),#L$LEN ; IS CONTEXT AREA LARGE ENOUGH ?
: BLT 40$ ; IF LT, NO - ERROR
:
: ZERO CONTEXT AREA
:
: MOV R4,R0 ; COPY CONTEXT POINTER
: MOV #<L$CIN/2>,R5 ; SET NUMBER OF WORDS TO CLEAR
30$: CLR (R0)+ ; CLEAR IT
: SOB R5,30$ ; ...
:
```

DACOU - READ/AND OR ZERO DA COU MACRO V05.03b Saturday 29-Jun-85 <sup>M 7</sup> 12:20 Page 5  
MACRO CALLS AND LOCAL DEFINITIONS

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56 000000  
57 000000  
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```
.SBTTL  MACRO CALLS AND LOCAL DEFINITIONS
:
: MACRO LIBRARY CALLS
:
.MCALL  SAVMAP,MAP,BIAS,RESMAP,SAVRG,RESRG,CALLR,DLCOU$
.MCALL  DADF$,SLTDF$,CIRCX$

DADF$   : DEFINE DA SYMBOLS
SLTDF$  : DEFINE SLT OFFSETS
```

DACOU CREATED BY MACRO ON 29-JUN-85 AT 12:21 PAGE 5 M 8  
 MACRO CROSS REFERENCE CREF 04.00

| MACRO NAME | REFERENCES                               |
|------------|------------------------------------------|
| BIAS       | #5-53 10-131                             |
| CALL       | 10-121 10-136 10-137 10-139              |
| CALLR      | #5-53                                    |
| CIRCX\$    | #5-54 6-62                               |
| DADF\$     | #5-54 5-56                               |
| DLBM\$     | #9-88 #9-93 #9-94 #9-95 #9-96 #9-97      |
| DLCOUS     | #5-53 9-88 9-89 9-93 9-94 9-95 9-96 9-97 |
| MAP        | #5-53 10-124                             |
| RESMAP     | #5-53 10-140                             |
| RESRG      | #5-53                                    |
| RETURN     | 10-142                                   |
| SAVMAP     | #5-53 10-122                             |
| SAVRG      | #5-53                                    |
| SLTDF\$    | #5-54 5-57                               |
| SWSTK\$    | 10-121                                   |
| TMPDF\$    | #5-56 5-56                               |
| .ADDRB     | #5-56                                    |
| .ADDRW     | #5-56                                    |
| .APR       | #5-56                                    |
| .BIN       | #5-56                                    |
| .CNB       | #5-56                                    |
| .CNW       | #5-56                                    |
| .CORE      | #5-56                                    |
| .CSR       | #5-56 5-56                               |
| .CTIM      | #5-56                                    |
| .DPRB      | #5-56                                    |
| .DPRW      | #5-56                                    |
| .DVCHA     | #5-56                                    |
| .INT       | #5-56 5-56 5-56                          |
| .INT1      | #5-56                                    |
| .INT2      | #5-56                                    |
| .INT3      | #5-56                                    |
| .LFLHD     | #5-56                                    |
| .LIBR      | #5-56                                    |
| .LINKS     | #5-56                                    |
| .LSTHD     | #5-56 5-56                               |
| .LTAB      | #5-56                                    |
| .MPLHD     | #5-56                                    |
| .MXPTB     | #5-56                                    |
| .PECHA     | #5-56                                    |
| .POOL      | #5-56                                    |
| .PRI       | #5-56 5-56                               |
| .SCOM      | #5-56                                    |
| .SECSR     | #5-56                                    |
| .SLNB      | #5-56                                    |
| .SLNW      | #5-56 5-56                               |
| .STNB      | #5-56                                    |
| .STNW      | #5-56                                    |
| .TIME      | #5-56                                    |
| .UNB       | #5-56                                    |
| .UNW       | #5-56                                    |
| .VFX       | #5-56                                    |



```

Symbol table
A$CHK= 000000
A$CPS= 000000
A$PRI= 000000
A$TRP= 000000
BIT0 = 000001
BIT1 = 000002
BIT10 = 002000
BIT11 = 004000
BIT12 = 010000
BIT13 = 020000
BIT14 = 040000
BIT15 = 100000
BIT2 = 000004
BIT3 = 000010
BIT4 = 000020
BIT5 = 000040
BIT6 = 000100
BIT7 = 000200
BIT8 = 000400
BIT9 = 001000
BS10 = 000003
BS11 = 000004
BS12 = 000005
BS5 = 000000
BS6 = 000001
BS7 = 000002
BS7S10 = 000006
C$CKP= 000000
C$ORE= 000400
C$RSH= 177564
DCPCIR 000314RG
DCPCIO 000000R
DCPCIT 000012R
DCPLIN 000312RG
DCPLNO 000004R
DCPLN1 000214R
D$FJG= 177514
D$ISK= 000000
D$LL1= 000001
D$YNC= 000000
D$YNM= 000000
E$XPR= 000000
FMTCOU= ***** GX
FNDDCP= ***** GX
F$LVL= 000001
G$TTP= 000000
G$TSS= 000000
G$TTK= 000000
G$WRD= 000000
I$RAR= 000000
I$SRDN= 000000
KISARG= ***** GX
K$CNT= 177546
K$CSR= 177546
K$SLD= 000000
K$STPS= 000074
LD$LP = 000000
LE.NRH= 000200
LE.NRO= 000001
LE.NSH= 000002
LE.NSO= 000020
LE.RCO= 000040
LE.SAF= 000004
LE.STT= 000010
LE.XTU= 000100
LF$END= 000020
LF$MLT= 040000
LF$REA= 000001
LF$SEG= 100000
LF$SIG= 000040
LF$SKP= 000004
LF$VR2= 000010
LF$ZER= 000002
LP$MPT= 000010
LP$MUX= 000004
LP$TRB= 000002
LP$UNT= 000001
LP$WCN= 000040
LP$WDV= 000020
LP$WLD= 000360
LP$WTR= 000200
LP$WUN= 000100
L$ADJ 000110
L$BUF 000060
L$CHN 000054
L$COU 000114
L$CTP 000053
L$CT 000002
L$F 000000
L$FJ 000064
L$FLX 000070
L$LEN 000124
L$LTM 000070
L$MSG 000056
L$MTYP 000067
L$NAM 000000
L$NLEN= 000020
L$NOD 000112
L$NXT 000044
L$OPT 000062
L$PAR 000120
L$PDV 000055
L$PFG 000041
L$PLB 000116
L$PRO 000067
L$PVC 000004
L$SCN 000020
L$SCR 000072
L$SLN 000066
L$SLT 000042
L$SNM 000046
L$SYL 000122
L$TNM 000052
L$TPT 000050
L$TRB 000040
L$TSZ 000070
L$TYP 000063
L$UNT 000033
L$ASG= 000000
L$DRV= 000000
L$P11= 000001
L$P1R= 000000
L$BABL 000062
L$BUFU 000052
L$CHA 000034
L$CNTL 000024
L$CRC 000030
L$CRS 000040
L$DISL 000042
L$DISR 000044
L$ENA 000066
L$LNAM 000046
L$NAST 000065
L$NCUB 000012
L$NCUL= 000050
L$NIP 000010
L$NLSE 000054
L$NRSE 000053
L$PAIC 000017
L$PAIR 000016
L$PLD 000047
L$PLL 000012
L$SCFW 000056
L$STA 000063
L$STBL 000070
L$STRC 000050
L$STRM 000051
L$STS 000002
L$ST2 000003
L$TBP 000004
L$TIMC 000060
L$TIM1 000001
L$TIMR 000000
L$TOR 000064
L$XSET 000020
M$CRB= 000124
M$CRX= 000000
M$FCS= 000000
M$MGE= 000000
M$NET= 000000
M$OVR= 000000
N$ACC= 000001
N$BUF= 000001
N$LDV= 000001
N$MCP= 000001
N$MLL= 000001
N$MOV= 000010
N$NCT= 000001
N$PEM= 000001
P$P45= 000000
P$WRD= 000000
Q$OPT= 000010
R$R3 = ***** GX
R$R5 = ***** GX
R$SDER= 000000
R$SK11= 000001
R$SND= 000000
R$11M= 000000
SE.IRS= 004000
SE.NRS= 002000
SE.RBS= 001000
SE.RBU= 000400
SE.RCH= 000001
SE.RDC= 000002
SE.RRR= 000004
SE.SBS= 000200
SE.SBU= 000100
SE.SDC= 000020
SE.SHC= 000010
SE.SRR= 000040
S$WRG= 000000
S$YSZ= 007600
S.ALF 000044
S.BKLC 000033
S.COUB 000044
S.COUL= 000040
S.DLCF 000102
S.FNCP 000004
S.HTNA 000023
S.LGR 000031
S.LMA 000026
S.LMOS 000030
S.LMRT 000027
S.LMS 000025
S.LNK 000000
S.NCUB 000000
S.NCUL= 000036
S.NCLR 000040
S.NKR 000037
S.NKRB 000052
S.NKRW 000045
S.NKSB 000051
S.NKSW 000046
S.NTD 000024
S.PLA 000010
S.PLC 000022
S.PLL 000006
S.PLS 000011
S.RCVB 000072
S.RVCV 000056
S.REPR 000050
S.REPS 000047
S.RST 000036
S.RTEC 000042
S.SELC 000066
S.SELT 000053
S.STE 000002
S.STEC 000043
S.STLG 000104
S.STLN 000035
S.STPN 000034
S.TIMC 000054
S.TNRP 000032
S.TTEC 000041
S.WFA 000016
S.XMT 000012
S.XMTB 000076
S.XMTC 000062
T$KMG= 000000
T$MIN= 000000
V$CTR= 001000
XPTCOU= ***** GX
X$DBT= 000000
$BM = 010000
$LCNT= 000072 G
$LLIN= 000104 G
$OFF = 000056
$REG = 000000
$TST = 000200
$WID = 002000

```

. ABS. 000124 000 (RW,I,GBL,ABS,OVR)  
000552 001 (RW,I,LCL,REL,CON)  
Errors detected: 0

\*\*\* Assembler statistics

DEALUN      CREATED BY    MACRO    ON 29-JUN-85 AT 17:42      PAGE 1      M 10  
SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE      | REFERENCES |
|---------|------------|------------|
| DEALUN  | 000000 RG  | #6-76      |
| HEADR   | = ***** GX | 6-90       |
| H.LUN   | 000076     | *6-91      |
| ISSAS   | = *****    | 5-61       |
| RSSMPL  | = *****    | 6-80       |
| \$TMLUN | = ***** GX | *6-91      |

6-78

DLCCOW - READ AND ZERO DLC PRO MACRO V05.03b Saturday 29-Jun-85 12:22 Page 9-1  
 RQSTCO - Request counters from DLC process

```

259 000554 012664 000010      MOV    (SP)+,C.FNC(R4)      ;; Stuff function into CCB
260 000560 001431              BEQ     40$                ;; If EQ, trouble
261 000562 116464 000011 000002  MOVB   C.FNC+1(R4),C.RSV(R4)  ;; Copy subfunction code for DLC use
262                                     .IIF NE CM.LIN .ERROR      ;; Value error
263
264 000570 005064 000022      CLR     C.FLG1(R4)          ;; Set return to AUX, LINE entity
265 000574 005767 177200      TST     ENTITY              ;; Recover entity type
266 000600 100404              BMI     30$                ;; If MI, entity = CIRCUIT
267 000602 032765 000010 000064  BIT     #LF$VR2,L$FLG(R5)      ;; else are we speaking via NICE V2.0 ?
268 000610 001403              BEQ     35$                ;; if EQ, no - he really means LINE
269 000612 152764 000002 000022 30$: BISB   #CM.CIR,C.FLG1(R4)      ;; Else make it CIRCUIT
270 000620 017700 000000G      MOV     @TKTCB,R0          ;; Point to our TCB ; RJK01
271 000624 016064 000000G 000034 35$: MOV    T.NAM(R0),C.ADD(R4)      ;; Set up taskname
272 000632 016064 000002G 000036  MOV    T.NAM+2(R0),C.ADD+2(R4)  ;; for AUX
273 000640              CALLR   @NMCRS                ;; Queue CCB, back to user state; RJK01
274
275      ;
276      ; Error return
277
278 000644 010066 000000G      40$: MOV     R0,R$RO(SP)        ;; Pass error back in user R0
279 000650              RETC    R0                        ;; Set user C-bit
280 000662              50$: RETURN                     ;; Leave system state and return
281

```

\*\*FILE\*\*ID\*\*DLMCOU

```

DDDDDDDD LL MM MM CCCCCCCC 000000 UU UU
DDDDDDDD LL MM MM CCCCCCCC 000000 UU UU
DD DD LL MMMM MMMM CC 00 00 UU UU
DD DD LL MMMM MMMM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DD DD LL MM MM MM CC 00 00 UU UU
DDDDDDDD LLLLLLLLLL MM MM CCCCCCCC 000000 UUUUUUUUUU
DDDDDDDD LLLLLLLLLL MM MM CCCCCCCC 000000 UUUUUUUUUU

```

```

LL SSSSSSSS TTTTTTTTTT
LL SSSSSSSS TTTTTTTTTT
LL SS TT
LL SS TT
LL SS TT
LL SS TT
LL SSSSSS TT
LL SSSSSS TT
LL SS TT
LL SS TT
LL SS TT
LL SS TT
LL SSSSSSSS TT
LL SSSSSSSS TT

```

|                |                |                 |                 |                |
|----------------|----------------|-----------------|-----------------|----------------|
| MD\$DQ 000006  | ME\$OBJ 000007 | ML\$FIL 000002  | MP\$BDF 002164  | MP\$DUM 000202 |
| MD\$DTE 000024 | ME\$OB2 000004 | ML\$FIR 000000  | MP\$BFQ 002121  | MP\$DUP 002127 |
| MD\$DU 000002  | ME\$PRO 000005 | ML\$INT 000000  | MP\$BLK 001616  | MP\$DVC 002114 |
| MD\$DUP 000012 | ME\$SYS 000006 | ML\$KNO 140000  | MP\$BL0 001452  | MP\$DWE 001321 |
| MD\$DV 000026  | ME\$BLO 177744 | ML\$MON 000003  | MP\$BMX 002176  | MP\$ELT 000157 |
| MD\$DZ 000030  | ME\$CON 177753 | ML\$SYS 000002  | MP\$BNP 006330  | MP\$ETY 001605 |
| MD\$FUL 000000 | ME\$CST 177765 | ML\$TOP 000001  | MP\$BRT 001620  | MP\$EVE 000311 |
| MD\$HAL 000001 | ME\$DIS 177755 | MN\$UNL 000377  | MP\$BSA 002176  | MP\$FNC 001752 |
| MD\$HEL 000002 | ME\$DON 177600 | MO\$ACC 000200  | MP\$BSD 002203  | MP\$GDT 002222 |
| MD\$KCP 000013 | ME\$FCO 177762 | MO\$ADD 000002  | MP\$BSI 002200  | MP\$GNM 002223 |
| MD\$KDP 000034 | ME\$FIO 177756 | MO\$ALA 000004  | MP\$BSP 006331  | MP\$GRO 002115 |
| MD\$KDZ 000036 | ME\$FOP 177763 | MO\$ALI 000000  | MP\$BUF 000170  | MP\$GRP 000541 |
| MD\$KIL 000040 | ME\$FOR 177776 | MO\$CHA 000040  | MP\$BUP 006324  | MP\$GTY 002224 |
| MD\$KMX 000054 | ME\$FUN 177777 | MO\$CLR 000003  | MP\$BUS 001643  | MP\$HAD 001757 |
| MD\$KMY 000052 | ME\$GRO 177745 | MO\$CLE 000100  | MP\$CAC 001750  | MP\$HBT 002142 |
| MD\$LEN 000050 | ME\$HAR 177750 | MO\$COU 000060  | MP\$CAS 001762  | MP\$HDD 000162 |
| MD\$PLC 000011 | ME\$IID 177767 | MO\$DAC 000000  | MP\$CAT 002210  | MP\$HTM 001612 |
| MD\$QNA 000005 | ME\$LCO 177766 | MO\$DEF 000000  | MP\$CCS 004406  | MP\$HWA 002210 |
| MD\$UNA 000001 | ME\$LPR 177757 | MO\$DPR 000000  | MP\$CHN 002141  | MP\$JAT 001322 |
| MD\$WIT 000002 | ME\$MPR 177773 | MO\$ENT 000017  | MP\$CJR 000144  | MP\$IDE 000144 |
| MD\$ABO 000017 | ML\$MVE 177771 | MO\$EVE 000100  | MP\$CLK 002131  | MP\$IDP 006327 |
| MD\$ACC 000010 | ME\$OPE 177747 | MO\$INF 000160  | MP\$CLN 002126  | MP\$IHO 000215 |
| MD\$AOB 000016 | ME\$PLO 177751 | MO\$INS 000002  | MP\$CLT 002211  | MP\$INA 002177 |
| MD\$BOB 000011 | ME\$PMI 177743 | MO\$LIN 000001  | MP\$CMB 002142  | MP\$IND 002204 |
| MD\$DIA 000007 | ME\$PNA 177752 | MO\$LOG 000001  | MP\$CMK 000537  | MP\$INI 002201 |
| MD\$DOB 000015 | ME\$PRI 177775 | MO\$MTR 000031  | MP\$CMX 002153  | MP\$ITI 000776 |
| MD\$DUM 000002 | ME\$PTY 177772 | MO\$NAM 000001  | MP\$CND 000310  | MP\$LAA 000231 |
| MD\$FAI 000014 | ME\$PVA 177760 | MO\$NIC 000023  | MP\$CNU 001753  | MP\$LAN 000234 |
| MD\$FNA 000001 | ME\$RES 177761 | MO\$NOD 000000  | MP\$COB 000311  | MP\$LAR 000202 |
| MD\$FOB 000006 | ME\$ROO 177754 | MO\$OFF 000001  | MP\$CON 002126  | MP\$LAS 000012 |
| MD\$LOA 000001 | ME\$SIZ 177774 | MO\$ON 000000   | MP\$COS 001604  | MP\$LSB 000203 |
| MD\$LSH 000020 | ME\$SYS 177746 | MO\$OPT 000001  | MP\$CPF 000230  | MP\$LCO 000226 |
| MD\$NOB 000012 | ME\$UCO 177770 | MO\$PER 000200  | MP\$CPL 000232  | MP\$LCT 000136 |
| MD\$NON 177777 | MF\$ACT 177776 | MO\$PRO 000002  | MP\$CPT 000226  | MP\$LHL 000232 |
| MD\$PER 000000 | MF\$ADD 000000 | MO\$PRS 000001  | MP\$CPU 000161  | MP\$LLE 000227 |
| MD\$RES 000004 | MF\$ADJ 177774 | MO\$REA 000200  | MP\$CSZ 001755  | MP\$LLO 004432 |
| MD\$ROB 000005 | MF\$ALL 177775 | MO\$SET 000000  | MP\$CUS 002127  | MP\$LMB 002152 |
| MD\$RSH 000013 | MF\$BYE 000300 | MO\$STA 000020  | MP\$CVA 000540  | MP\$LMX 002200 |
| MD\$SDU 000005 | MF\$CHA 000023 | MO\$SUM 000000  | MP\$DAL 002570  | MP\$LNA 000144 |
| MD\$SLD 000003 | MF\$DUM 000020 | MO\$TSK 000000  | MP\$DCO= 001464 | MP\$LNO 000233 |
| MD\$SNA 000000 | MF\$EVT 000001 | MO\$VOL 000000  | MP\$DDT 002177  | MP\$LOA 000170 |
| MD\$TLO 000004 | MF\$FUP 000264 | MO\$ZER 000000  | MP\$DEL 001131  | MP\$LOG 004514 |
| MD\$UNA 000002 | MF\$KNO 177777 | MP\$ACB 000012  | MP\$DES 000156  | MP\$LOD 000620 |
| MD\$UNR 000003 | MF\$LOA 000017 | MP\$ACC 000514  | MP\$DEV 002114  | MP\$LTM 001613 |
| MD\$UOB 000007 | MF\$LOO 177775 | MP\$ACT 004526  | MP\$DFA 001320  | MP\$LTY 004533 |
| MD\$VOL 000006 | MF\$REA 000024 | MP\$ADD 000770  | MP\$DHO= 001465 | MP\$LWI 000230 |
| MESAL1 000010  | MF\$SIG 177773 | MP\$ADJ 001440  | MP\$DIA 000173  | MP\$MAC 004420 |
| MESAL2 000003  | MF\$SPF 000302 | MP\$ADP 006325  | MP\$DLB 002571  | MP\$MAD 001630 |
| MESARE 000005  | MF\$SYS 000026 | MP\$ADS 004406  | MP\$DLG 004521  | MP\$MAP 006323 |
| MESCLR 000003  | MF\$TES 000022 | MP\$ALB 000036  | MP\$DLI= 001466 | MP\$MAR 001635 |
| MESEXA 000000  | MF\$TRA 000301 | MP\$AMC 001640  | MP\$DLT 002200  | MP\$MAV 006321 |
| MESEXE 000200  | MF\$TRI 000021 | MP\$AMH 001641  | MP\$DR0 001441  | MP\$MBN 001636 |
| MESLIN 000001  | MF\$ZER 000025 | MP\$ANB 004420  | MP\$DST 000454  | MP\$MBR 001637 |
| MESLOG 000002  | ML\$ALL 100000 | MP\$ASB 000024  | MP\$DTE 002140  | MP\$MBU 001642 |
| MESMOD 000004  | ML\$CLS 000000 | MP\$ASC 004432  | MP\$DTY= 001452 | MP\$MCB 000156 |
| MESNOD 000000  | ML\$CON 000001 | MP\$SAUS 000512 | MP\$DUA 000207  | MP\$MCO 001632 |
| MESNON 177777  | ML\$EXT 000001 | MP\$BBT 002165  | MP\$DUC 000210  | MP\$MDE 004421 |

```

000122      L$BSA: .BLKB 1      ; DMP ACTIVE BASE
000123      L$BSD: .BLKB 1      ; DMP DYING BASE
000124      L$BSI: .BLKB 1      ; DMP INACTIVE BASE
000125      L$INA: .BLKB 1      ; DMP ACTIVE INCREMENT
000126      L$IND: .BLKB 1      ; DMP DYING INCREMENT
000127      L$INI: .BLKB 1      ; DMP INACTIVE INCREMENT
000130      L$TH1: .BLKB 1      ; DMP DEAD THRESHOLD
000131      L$TH2: .BLKB 1      ; DMP DYING THRESHOLD
000132      L$TH3: .BLKB 1      ; DMP INACTIVE THRESHOLD
000133      L$MXB: .BLKB 1      ; DMP MAXIMUM BLOCKS
000134      L$NTL: .BLKW 13.    ; NTL MESSAGE BUFFER
000166      L$SCR: .BLKW 15.    ; SCRATCH BUFFER
000224      L$LC7: .BLKW 1      ; COUNTER TIMER
000226      L$HTM: .BLKW 1      ; HELLO TIMER
000230      L$SER: .BLKW 1      ; SERVICE
000230      L$LTM: .BLKW 1      ; LISTEN TIMER
000232      L$XCH: .BLKW 1      ; X25 Logical Channel Number (LCN)
000234      L$LMB: .BLKW 1      ; X25 Max Block (Line)
000234      L$CMB: .BLKW 1      ; X25 Max Data (Circuit)
000236      L$NUML: .BLKW 1      ; DLM Number length
000236      L$DTEL: .BLKW 1      ; X25 DTE length (Circuit)
000240      L$NUM: .BLKW 1      ; DLM Number
000240      L$DTE: .BLKB 8.    ; X25 DTE (Circuit)
000250      L$DTEP: .BLKW 1      ; X25 Pointer to DTE descriptor (Circuit)
000252      L$MWN: .BLKB 1      ; X25 Max Window (Line)
000252      L$MXW: .BLKB 1      ; X25 Max Window (Circuit)
000253      L$MRT: .BLKB 1      ; X25 Max Retransmits (Line)
000253      L$MXR: .BLKB 1      ; DLM Max Recalls (Circuit)
000254      L$HBT: .BLKW 1      ; X25 Holdback Timer (Line)
000256      L$NTI: .BLKB 1      ; X25 Retransmit Timer (Line)
000256      L$RET: .BLKW 1      ; DLM Recall Timer (Circuit)
000260      L$CUS: .BLKW 1      ; DLM Usage
000262      L$BLK: .BLKW 1      ; DLM blocking state
          ; IF DF R$PRO ;PRO/DEnet
          L$LTY: .BLKW 1      ; Loopback Type
          L$MDT: .BLKW 1      ; Modem Test
          .ENDC ; DF R$PRO
          L$LEN: .BLKW 1      ; LENGTH OF CONTEXT AREA
          .PSECT
          ;
          ; FLAGS WORD BIT DEFINITIONS (L$FLG)
          ;
          000001      L$REA = 1      ; READ COUNTERS OPERATION
          000002      L$ZER = 2      ; ZERO COUNTERS OPERATION
          000004      L$SKP = 4      ; SKIP NEXT "FIND NEXT LINE" OPERATION.
          ; THIS IS USED TO FORCE AN EXTRA PASS
          ; FOR A MULTIPOINT LINE TO RETURN THE
          ; CONTROLLER COUNTERS AS WELL AS ALL
          ; OF THE TRIBUTARY COUNTERS.
          000010      L$VR2 = 10     ; CONNECTED TO VERSION 2.0 NCP
          040000      L$MLT = 40000  ; MULTIPLE ADJACENCY FLAG
          100000      L$SEG = 100000 ; SEGMENTED RESPONSE IN PROGRESS
          ;
          ; PARSE FLAG DEFINITIONS (L$PFG)
          ;
          000001      L$SUNT = 1      ; UNIT NUMBER FOUND

```

DLXQID CREATED BY MACRO ON 29-JUN-85 AT 12:23 PAGE 5 M 15

MACRO CROSS REFERENCE CREF 04.00

MACRO NAME REFERENCES

|         |        |       |        |       |        |       |        |        |       |
|---------|--------|-------|--------|-------|--------|-------|--------|--------|-------|
| ALUN\$S | #5-60  | 9-203 |        |       |        |       |        |        |       |
| CALL    | 8-111  | 8-138 | 8-178  | 9-202 |        |       |        |        |       |
| CICCX\$ | #5-59  | 6-75  |        |       |        |       |        |        |       |
| DIR\$   | #8-149 | 8-149 | #8-160 | 8-160 | #9-203 | 9-203 | #9-206 | 9-206  |       |
| GLUN\$S | #5-60  | 9-206 |        |       |        |       |        |        |       |
| MOV\$   | #8-149 | 8-149 | 8-149  | 8-149 | #8-149 | 8-149 | 8-149  | #8-149 | 8-149 |
|         | #9-203 | 9-203 | 9-203  | 9-203 | #9-206 | 9-206 | 9-206  |        |       |
| MVB\$   | #8-149 | 8-149 |        |       |        |       |        |        |       |
| OFF\$   | #9-206 |       |        |       |        |       |        |        |       |
| QDPB\$S | #8-149 | 8-149 |        |       |        |       |        |        |       |
| QIOW\$S | #5-60  | 8-149 |        |       |        |       |        |        |       |
| QIO\$S  | #5-60  |       |        |       |        |       |        |        |       |
| RESRG   | #5-59  | 8-142 | 9-211  |       |        |       |        |        |       |
| RETURN  | 8-184  | 9-212 |        |       |        |       |        |        |       |
| RVP\$   | #8-149 | 8-149 | 8-149  | 8-149 |        |       |        |        |       |
| SAVRG   | #5-59  | 8-130 | 9-201  |       |        |       |        |        |       |
| WSIG\$S | #5-60  | 8-160 |        |       |        |       |        |        |       |

|                   |                 |                 |                 |                   |
|-------------------|-----------------|-----------------|-----------------|-------------------|
| ASSCHK= 000000    | LFSREA= 000001  | LSSNMT= 020000  | L\$INA 000125   | L\$TRB 000040     |
| ASSCPS= 000000    | LFSSEC= 100000  | LSSNOR= 100000  | L\$IND 000126   | L\$TYP 000063     |
| ASSPRI= 000000    | LFSKPK= 000004  | LSSNTI= 000200  | L\$INI 000127   | L\$UNT 000003     |
| ASSTRP= 000000    | LFSVRZ= 000010  | LSSNTL= 000001  | L\$LCI 000224   | L\$XCH 000232     |
| CURCTX= ***** GX  | LFSZFR= 000002  | LSSNUM= 000100  | L\$LEN 000264   | L\$XMT 000120     |
| C\$LOC = ***** GX | LPSMPT= 000010  | LSSOWN= 000010  | L\$LMB 000234   | L\$SASG= 000000   |
| C\$STAT= ***** GX | LPSMUX= 000004  | LSSPLT= 004000  | L\$LTM 000230   | L\$SDRV= 000000   |
| C\$CKCP= 000000   | LPSNYC= 100000  | LSSPRO= 010000  | L\$MRT 000253   | L\$SP11= 000001   |
| C\$SORE= 000400   | L\$STRB= 000002 | LSSPVC= 020053  | L\$MSG 000056   | L\$S11R= 000000   |
| C\$RSH= 177564    | L\$SUNT= 000001 | L\$SRET= 000200 | L\$MTYP 000075  | M\$SACP= 000001   |
| DEALUN= ***** GX  | L\$SWCN= 000040 | L\$SSER= 100000 | L\$MWN 000252   | M\$SCRB= 000124   |
| DLXAST= ***** GX  | L\$WDV= 000020  | L\$SSTA= 000002 | L\$MXB 000133   | M\$SCRX= 000000   |
| DLXERR 000014R    | L\$WLD= 000360  | L\$SSVC= 000362 | L\$MXR 000253   | M\$SFC= 000000    |
| DLXLUN 000204RG   | L\$WTR= 000200  | L\$STAD= 000020 | L\$MXW 000252   | M\$SMGE= 000000   |
| DLXMSG 000000R    | L\$WUN= 000100  | L\$STH1= 000100 | L\$NAM 000000   | M\$SNET= 000000   |
| DLXQIO 000022RG   | L\$SACT= 00004  | L\$STH2= 000200 | L\$NLEN= 000020 | M\$SOVR= 000000   |
| DLXTXT 000001R    | L\$SBBT= 010000 | L\$STH3= 000400 | L\$NMT 000116   | N\$SACC= 000001   |
| D\$BUG= 177514    | L\$SBLK= 001000 | L\$SMT= 040000  | L\$NTI 000256   | N\$SBUF= 000001   |
| D\$ISK= 000000    | L\$SBSA= 000001 | L\$SACT 000104  | L\$NTL 000134   | N\$SLDV= 000001   |
| D\$LL1= 000001    | L\$SBSI= 000002 | L\$SBLK 000114  | L\$NUM 000240   | N\$SMCP= 000001   |
| D\$SYNC= 000000   | L\$SBSI= 000004 | L\$BLK 000262   | L\$NUML 000236  | N\$SMLL= 000001   |
| D\$SYNM= 000000   | L\$SCHN= 000001 | L\$BSA 000122   | L\$NXT 000044   | N\$SMOV= 000010   |
| E\$XPR= 000000    | L\$SCMB= 000002 | L\$BSD 000123   | L\$OPT 000062   | N\$SNCT= 000001   |
| FMTLIN= ***** GX  | L\$SCOS= 000004 | L\$BSI 000124   | L\$OWN 000102   | N\$SPEM= 000001   |
| FORK = ***** GX   | L\$SCUS= 000004 | L\$BUF 000060   | L\$PAR 000072   | P\$SP45= 000000   |
| F\$SLVL= 000001   | L\$SDDT= 001000 | L\$CHW 000054   | L\$PDV 000055   | P\$SWRD= 000000   |
| G\$STPP= 000000   | L\$SDEA= 000100 | L\$CMB 000234   | L\$PFG 000041   | Q\$OPT= 000010    |
| G\$STSS= 000000   | L\$SDLM= 001004 | L\$COS 000101   | L\$PLT 000112   | R\$SODR= 000000   |
| G\$STTK= 000000   | L\$SDLT= 002000 | L\$CTB 000053   | L\$PRO 000075   | R\$SK1= 000001    |
| G\$SWRD= 000000   | L\$SDTE= 000010 | L\$CTL 000002   | L\$PVC 000004   | R\$SJO= 000000    |
| G.LUCW= 000004    | L\$SHBT= 000400 | L\$CUS 000260   | L\$RET 000256   | R\$S11M= 000000   |
| G.LUFB= 000003    | L\$SHTM= 010000 | L\$DDM 000000   | L\$SCN 000020   | STATUS= ***** GX  |
| G.LUNA= 000000    | L\$SINA= 000010 | L\$DDT 000106   | L\$SCR 000166   | S\$SWRG= 000000   |
| G.LUNU= 000002    | L\$SIND= 000020 | L\$DEA 000105   | L\$SER 000230   | S\$YSZ= 007600    |
| IE.UPN= ***** GX  | L\$SINI= 000040 | L\$DLT 000110   | L\$LEN 000074   | T\$SKMG= 000000   |
| I\$RAR= 000000    | L\$SLCT= 020000 | L\$DTE 000240   | L\$SLT 000042   | T\$SMIN= 000000   |
| I\$RDN= 000000    | L\$SLMB= 000002 | L\$DTEL 000236  | L\$SNM 000046   | V\$CTR= 001000    |
| K\$CNT= 177546    | L\$SLQ= 040000  | L\$DTEP 000250  | L\$STA 000100   | X\$SDBT= 000000   |
| K\$CSR= 177546    | L\$SMDT= 020000 | L\$FLG 000064   | L\$TAD 000103   | \$CDSG= ***** GX  |
| K\$LDL= 000000    | L\$SMRT= 000020 | L\$FLX 000076   | L\$TH1 000130   | \$DSW = ***** GX  |
| K\$STPS= 000074   | L\$SMWN= 000040 | L\$FL1 000066   | L\$TH2 000131   | \$SAVAL= ***** GX |
| LCNTL= 000200     | L\$SMXB= 001000 | L\$FL2 000070   | L\$TH3 000132   | \$TMLUN= ***** GX |
| LCOWN= 000400     | L\$SMXR= 000020 | L\$HBT 000254   | L\$TNM 000052   | \$SARG= 000002    |
| LDLP= 000000      | L\$SMXW= 000040 | L\$HTM 000226   | L\$TPT 000050   | \$SOST= 000014    |
| L\$MLT= 040000    |                 |                 |                 |                   |

. ABS. 000264 000 (RW,I,GBL,ABS,OVR)  
 000272 001 (RW,I,LCL,REL,CON)  
 Errors detected: 0

\*\*\* Assembler statistics

Work file reads: 0  
 Work file writes: 0  
 Size of work file: 13960 Words ( 55 Pages)  
 Size of core pool: 15496 Words ( 59 Pages)



## SYMBOL CROSS REFERENCE

CREF 04.00

| SYMBOL  | VALUE      | REFERENCES   |
|---------|------------|--------------|
| BIT0    | = 000001   | #5-61        |
| BIT1    | = 000002   | #5-61        |
| BIT10   | = 002000   | #5-61        |
| BIT11   | = 004000   | #5-61        |
| BIT12   | = 010000   | #5-61        |
| BIT13   | = 020000   | #5-61        |
| BIT14   | = 040000   | #5-61        |
| BIT15   | = 100000   | #5-61        |
| BIT2    | = 000004   | #5-61        |
| BIT3    | = 000010   | #5-61        |
| BIT4    | = 000020   | #5-61        |
| BIT5    | = 000040   | #5-61        |
| BIT6    | = 000100   | #5-61        |
| BIT7    | = 000200   | #5-61        |
| BIT8    | = 000400   | #5-61        |
| BIT9    | = 001000   | #5-61        |
| BS10    | 000003     | #5-61        |
| BS11    | 000004     | #5-61        |
| BS12    | 000005     | #5-61        |
| BS5     | 000000     | #5-61        |
| BS6     | 000001     | #5-61        |
| BS7     | 000002     | #5-61        |
| BS10    | 000006     | #5-61        |
| CIRECH  | = ***** GX | 6-72         |
| CIRECO  | = ***** GX | 6-74         |
| CIREOP  | 000022 RG  | #7-103       |
| CIREST  | = ***** GX | 6-75 6-76    |
| CIZEOP  | 000022 RG  | #7-104       |
| DISTBL  | 000000 R   | #6-70 7-129  |
| FMTICIR | = ***** GX | 7-125        |
| GETCIR  | 000226 R   | 7-116 #8-187 |
| ISSAS   | = *****    | 5-63         |
| LF\$END | = 000020   | #5-61        |
| LF\$MLT | = 040000   | #5-61        |
| LF\$REA | = 000001   | #5-61        |
| LF\$SEG | = 100000   | #5-61 7-111  |
| LF\$SIG | = 000040   | #5-61 7-141  |
| LF\$SKP | = 000004   | #5-61        |
| LF\$VR2 | = 000010   | #5-61        |
| LF\$ZER | = 000002   | #5-61        |
| LF.ACT  | = 100000   | #5-64 8-203  |
| LF.BRO  | = 000400   | #5-64 8-201  |
| LF.BWT  | = 000007   | #5-64        |
| LF.ENA  | = 002000   | #5-64        |
| LF.LPB  | = 001000   | #5-64        |
| LF.MDC  | = 000100   | #5-64        |
| LF.MFL  | = 004000   | #5-64        |
| LF.MTP  | = 000020   | #5-64 8-205  |
| LF.PAC  | = 000200   | #5-64        |
| LF.RDY  | = 040000   | #5-64        |
| LF.REA  | = 010000   | #5-64        |
| LF.SER  | = 000040   | #5-64        |

```

302                                     .SBTTL GETADE - Get an endnode adjacency
303                                     ;+
304                                     ** GETADE - Get an end node adjacency
305                                     ;
306                                     Inputs:      R1 - PLB address
307                                     ;
308                                     Output:       R1 - Adjacent node address or 0
309                                     TEMP - block size for adjacent node
310                                     ;
311                                     All registers are preserved.
312                                     ;
313 GETADE: SWSTK$ 20$                  ;; enter system state
314 SAVMAP                      ;; save APR 6 mapping
315 CLR R$R1+2(SP)                ;; zero saved R1
316 MOVB P$CHN(R1),R1             ;; pick up channel number from PLB
317 MOV #*RXPT,R2                ;; set up process id
318 CALL @PDVID                  ;; get PDV index                ; RJK05
319 BCS 10$                      ;; if CS, return nothing          ;*-1
320 ADD @PCVTA,R2                ;; point to PDV address          ; RJK05
321 MOV (R2),R2                  ;; point to PDV                ;*-1
322 MAP Z.DSP(R2)                ;; map onto process database
323 MOV Z.DAT(R2),R2             ;; point to transport database
324 BEQ 10$                      ;; br if transport not loaded
325 MOV N$ADJ1(R2),R1            ;; point to active adjacency
326 BIAS R1                      ;; map via APR 6
327 MOV A$NID(R1),R$R1+2(SP)     ;; get adjacent node address
328 MOV N$ADJ2(R2),R1            ;; get address of ADJ2
329 BIAS R1                      ;; make it an APR6 address
330 MOV A$TSZ(R1),TEMP           ;; get block size from ADJ2
331 RESMAP                      ;; restore APR 6 mapping
332 RETURN                      ;; back to user state

```

CIREST      CREATED BY    MACRO    ON 25-JUL-85 AT 15:36      PAGE 1      N 3  
 SYMBOL CROSS REFERENCE      CREF    04.00

| SYMBOL  | VALUE    | REFERENCES                                        |
|---------|----------|---------------------------------------------------|
| AT\$UP  | = 000010 | 9-371                                             |
| ASCIR   | 000003   | 9-373                                             |
| ASLEN   | 000004   | 9-368                                             |
| ASNID   | 000000   | 8-327 9-376                                       |
| ASTSZ   | 000000   | 8-330 9-378                                       |
| ASTYP   | 000002   | 9-371                                             |
| BIT0    | = 000001 | #5-73                                             |
| BIT1    | = 000002 | #5-73                                             |
| BIT10   | = 002000 | #5-73                                             |
| BIT11   | = 004000 | #5-73                                             |
| BIT12   | = 010000 | #5-73                                             |
| BIT13   | = 020000 | #5-73                                             |
| BIT14   | = 040000 | #5-73                                             |
| BIT15   | = 100000 | #5-73                                             |
| BIT2    | = 000004 | #5-73                                             |
| BIT3    | = 000010 | #5-73                                             |
| BIT4    | = 000020 | #5-73                                             |
| BIT5    | = 000040 | #5-73                                             |
| BIT6    | = 000100 | #5-73                                             |
| BIT7    | = 000200 | #5-73                                             |
| BIT8    | = 000400 | #5-73                                             |
| BIT9    | = 001000 | #5-73                                             |
| BS10    | 000003   | #5-73                                             |
| BS11    | 000004   | #5-73                                             |
| BS12    | 000005   | #5-73                                             |
| BS5     | 000000   | #5-73                                             |
| BS6     | 000001   | #5-73                                             |
| BS7     | 000002   | #5-73                                             |
| BS7S10  | 000006   | #5-73                                             |
| CF\$VR2 | = *****  | GX 10-409                                         |
| CF\$VR3 | = *****  | GX 10-409                                         |
| CIREST  | 000052   | RG #7-158                                         |
| CURCTX  | = *****  | GX 10-408                                         |
| C\$FLAG | = *****  | GX 10-409                                         |
| DECPY   | = *****  | GX 7-249 7-264 10-417                             |
| D\$LNJM | 000014   | 10-418                                            |
| D\$NB:A | 000056   | 7-266                                             |
| D\$NBRA | 000054   | 7-265                                             |
| D\$NIN  | 000030   | 7-250 7-267                                       |
| FNDPLD  | 001366   | R 7-201 7-238 #12-504                             |
| GETADE  | 000636   | R 7-288 #8-313                                    |
| GETADJ  | 000764   | R 7-253 7-271 7-280 #9-351                        |
| I\$AS   | = *****  | 5-65 7-268                                        |
| KISAR6  | = *****  | GX 8-314 *8-322 *8-331 9-353 *9-363 *9-377 *9-383 |
| LF\$END | = 000020 | #5-73 7-245                                       |
| LF\$MLT | = 040000 | #5-73                                             |
| LF\$REA | = 000001 | #5-73                                             |
| LF\$SEG | = 100000 | #5-73 7-161 7-277 7-282                           |
| LF\$SIG | = 000040 | #5-73                                             |
| LF\$SKP | = 000004 | #5-73                                             |
| LF\$VR2 | = 000010 | #5-73                                             |
| LF\$ZER | = 000002 | #5-73                                             |

```

80      .SBTTL  SETTAD - SET TRIBUTARY STATION ADDRESS
81
82      **SETTAD-SET TRIBUTARY STATION ADDRESS
83
84      THIS ROUTINE IS CALLED TO CHANGE THE TRIBUTARY ADDRESS
85      FOR A MULTIPOINT LINE.
86
87      INPUTS:
88          R4 = ADDRESS OF CONTEXT AREA WITH:
89              L$TAD(R4) = NEW TRIBUTARY ADDRESS
90
91      OUTPUTS:
92          IF CC, ADDRESS SET,
93          ELSE, ERROR CODE IN R0
94
95      REGISTERS:
96          R4, R5 ARE PRESERVED
97
98
99      SETTAD::
100      000000      MOV     #ME.PNA,R0          ; ASSUME PARAMETER NOT APPLICABLE
101      000004      MOV     #MP$TRI,L$PAR(R4)    ;
102      000012      CMP     #-1,L$TPT(R4)        ; IS THIS A PVC?
103      000020      BEQ     70$                  ; BR IF YES
104      000022      MOV     L$SLT(R4),R1         ; POINT TO THE SLT
105      000026      BIT     #LF.MTP,L.FLG(R1)    ; IS THIS A MULTI-POINT LINE ?
106      000034      BNE     10$                  ; IF NE, YES - CONTINUE
107      000036      MOV     #ME.PNA,R0          ; SET PARAMETER NOT APPLICABLE ERROR
108      000042      BR      70$                  ; AND RETURN
109      000044      MOV     #ME.CS,R0            ; ASSUME LINE IS IN WRONG STATE
110      000050      MOV     #ME$LIN,L$PAR(R4)    ;
111      000056      TSTB    L.NSTA(R1)          ; MULTI-POINT MASTER ?
112      000062      BNE     15$                  ; IF NE, YES - CHECK TRIB STATE
113      000064      BIT     #LF.ACT,L.FLG(R1)    ; ELSE, IS THE LINE ACTIVE ?
114      000072      BNE     70$                  ; IF NE, YES - ERROR
115      000074      BR      17$                  ; ELSE, CONTINUE
116      000076      MOV     L$TPT(R4),R1        ; POINT TO THE TRIBUTARY FLAGS
117      000102      BITB    #SF.ACT,(R1)        ; IS THE LINE ACTIVE ?
118      000106      BNE     70$                  ; IF NE, YES - ERROR
119
120      17$:      SWSTK$   80$                    ; ENTER SYSTEM STATE
121      000114      SAVMAP ;                      ; SAVE OUR CURRENT MAPPING
122      000120      CALL    FNDDCP                ; FIND THE DCP LINE TABLE
123      000124      103031      BCC     30$        ; IF CC, FOUND IT
124
125      .IF NDF R$PRO ; PRO/DECnet
126
127      000126      020027      177765      CMP     R0,#ME.CST          ; ELSE, WAS IT A 'LINE STATE' ERROR ?
128      000132      001416      BEQ     20$          ; IF EQ, YES - RETURN WITH THAT ERROR
129      000134      CALL    FNDDPCL                ; ELSE, MAYBE IT'S A PCL ?
130      000140      103404      BCS     18$          ; BR IF NOT FOUND - TRY DMP
131      000142      116461      000103      000003      MOV     L$TAD(R4),S.PSA(R1) ; ELSE, SET NEW PHYSICAL ADDRESS
132      000150      000422      BR      40$          ; AND RETURN
133      000152      18$:      CALL    FNDDMP                ; FIND THE DMP LINE TABLE
134      000156      103404      BCS     20$          ; BR IF NOT FOUND
135      000160      116461      000103      000004      MOV     L$TAD(R4),T.TRP(R1) ; ELSE SET NEW TRIB ADDRESS
136      000166      000413      BR      40$          ; AND RETURN

```

## SYMBOL CROSS REFERENCE

CREF 04.00

| SYMBOL | VALUE     | REFERENCES      |
|--------|-----------|-----------------|
| R\$PRO | = *****   | 5-76 5-78 6-125 |
| R\$RTR | = *****   | 5-78            |
| R\$11D | = *****   | 5-63            |
| R\$11M | = 000000  | 5-63            |
| R\$11S | = *****   | 5-63            |
| R.CSR  | 000056    | #5-66           |
| R.FLG  | 000064    | #5-66           |
| R.LS   | 000104    | #5-66           |
| R.MAP  | 000110    | #5-66           |
| R.QUE  | 000062    | #5-66           |
| R.SLN  | 000070    | #5-66           |
| R.SRV  | 000060    | #5-66           |
| R.STA  | 000066    | #5-66           |
| R.STBL | 000210    | #5-66           |
| SETACT | 000230 RG | #7-169          |
| SETDEA | 000350 RG | #8-213          |
| SETTAD | 000000 RG | #6-99           |
| SF.ACT | = 000200  | #5-64 6-117     |
| SF.ENA | = 000100  | #5-64           |
| SF.LPB | = 000004  | #5-64           |
| SF.MFL | = 000040  | #5-64           |
| SF.PAC | = 000020  | #5-64           |
| SF.REA | = 000010  | #5-64           |
| SF.SER | = 000001  | #5-64           |
| SF.SVC | = 000002  | #5-64           |
| SF.UNL | = 000040  | #5-64           |
| S\$BAS | = *****   | 5-78            |
| S.COST | 000001    | #5-64           |
| S.CTL  | 000006    | #5-66           |
| S.ERR  | 000010    | #5-66           |
| S.FLG  | 000000    | #5-64           |
| S.LBE  | 000044    | #5-66           |
| S.LEN  | 000004    | #5-64           |
| S.LGTH | = 000050  | #5-66           |
| S.LIN  | 000004    | #5-66           |
| S.LINK | 177776    | #5-66 5-66      |
| S.LSA  | 000005    | #5-66           |
| S.NMST | 000002    | #5-64           |
| S.OWNR | 000003    | #5-64           |
| S.PLA  | 000010    | *7-182          |
| S.PSA  | 000003    | #5-66 *6-131    |
| S.RBE  | 000042    | #5-66           |
| S.RCB  | 000020    | #5-66           |
| S.RCV  | 000014    | #5-66           |
| S.RDE  | 000034    | #5-66           |
| S.RTY  | 000001    | #5-66           |
| S.STA  | 000000    | #5-66           |
| S.STPN | 000034    | *6-143          |
| S.TLZ  | 000012    | #5-66           |
| S.TMO  | 000040    | #5-66           |
| S.XDE  | 000036    | #5-66           |
| S.XID  | 000002    | #5-66           |

N 6

CIZEIN - CIRCUIT ZERO COUNTERS MACRO V05.03b Saturday 29-Jun-85 12:20 Page 6-1  
 CIZEIN - CIRCUIT ZERO COUNTERS INITIALIZE

```

127      ; MAKE SURE THERE IS NO INPUT DATA
128      ;
129 000106 012700 177776      MOV     #ME.FOR,R0      ; ASSUME ILLEGAL INPUT FORMAT
130 000112 005702      TST     R2              ; ANY INPUT DATA ?
131 000114 001010      BNE     40$              ; IF NE, YES - ILLEGAL
132      ;
133      ; CHECK AND SAVE LINE FORMAT
134      ;
135 000116 012764 000003 000072  MOV     #MES(CIR,1$PAR(R4)  ; SET ERROR DETAIL
136 000124      CALL     CHK CIR              ; CHECK CIRCUIT FORMAT
137 000130 103402      BCS     40$              ; IF CS, ERROR
138 000132 012700 000002      MOV     #MS.MOR,R0      ; ELSE, MORE TO COME
139      ;
140      ; USE THE STATUS IN R0 TO BUILD THE RETURN MESSAGE AND C-BIT RETURN
141      ;
142 000136 016403 000060 40$: MOV     L$BUF(R4),R3      ; RESTORE THE BUFFER ADDRESS
143 000142 012702 000001 50$: MOV     #1,R2              ; SET MESSAGE LENGTH TO 1 BYTE
144 000146 110013      MOVB    R0,(R3)              ; SET THE RETURN CODE
145 000150 100013      BPL     60$              ; IF PL, SUCCESS
146 000152 116463 000072 000001  MOVB    L$PAR(R4),1(R3)      ; STORE LOW BYTE OF ERROR DETAIL
147 000160 116463 000073 000002  MOVB    L$PAR+1(R4),2(R3)      ; STORE HIGH BYTE
148 000166 012702 000003      MOV     #3,R2              ; UPDATE LENGTH
149 000172 005064 000064      CLR     L$FLG(R4)          ; ELSE, UNSUCCESSFUL INIT
150 000176 000261      SEC                          ; ELSE, NO - SET ERROR RETURN
151 000200      60$: RETURN
152
153      000001      .END

```

60  
 61  
 62 000000

.SBTTL CONTEXT AREA DEFINITIONS

CIRCX\$ LIST

CONTEXT AREA OFFSET DEFINITIONS

000004  
 000000  
 000020

.ASECT

= 0

L\$NLEN = 16. ; MAXIMUM NAME LENGTH

The offsets L\$NAM to L\$PDV inclusive must appear in the same order  
 as in the CIRCX\$ and LOCCX\$ macros.

000000  
 000000  
 000002  
 000003  
 000004

L\$NAM:

L\$DDM: .BLKW 1

; DEVICE NAME

L\$CTL: .BLKB 1

; CONTROLLER NUMBER

L\$UNT: .BLKB 1

; UNIT NUMBER

L\$PVC: .BLKW 1

; 3RD WORD OF PVC NAME

= 0 + L\$NLEN

; SPACE FOR EXPANDED CIRCUIT NAME

L\$SCN: .BLKB 1

; CURRENT NAME IN WILDCARD SCAN

L\$TRB: .BLKB 1

; TRIBUTARY NUMBER

L\$PFG: .BLKB 1

; PARSE FLAGS

L\$SLT: .BLKW 1

; Current SLT/PVC address

L\$NXT: .BLKW 1

; Pointer to next SLT/PVC address

L\$SNM: .BLKW 1

; REMAINING NUMBER OF SYSTEM LINES

L\$TPT: .BLKW 1

; Current tributary pointer (-1 for PSI)

L\$TNM: .BLKB 1

; REMAINING NUMBER OF TRIBUTARIES

L\$CTB: .BLKB 1

; CURRENT TRIBUTARY NUMBER

L\$CHN: .BLKB 1

; Channel number / X.25 port number and

L\$PDV: .BLKB 1

; ... PDV assigned

L\$MSG: .BLKW 1

; ERROR MESSAGE STRING POINTER

L\$BUF: .BLKW 1

; SAVED BUFFER POINTER

L\$OPT: .BLKB 1

; SAVED OPTIONS BYTE

L\$TYP: .BLKB 1

; LINE-ID FORMAT TYPE

L\$FLG: .BLKW 1

; FLAG WORD

L\$SLEN: .BLKB 1

; Significant length of circuit name

L\$PRO: .BLKB 1

; Line protocol

L\$MTYP: .BLKB 1

; Network management circuit type

L\$TSZ: .BLKB 1

; Block size for transport circuits

L\$LTM: .BLKB 1

; Listen timer for transport circuits

L\$FLX: .BLKW 1

; Flags word for X.25 circuit commands

L\$SCR: .BLKW 7

; SCRATCH BUFFER

L\$ADJ: .BLKW 1

; Pointer to adjacency database

L\$NOD: .BLKW 1

; Adjacent node address

L\$COU: .BLKW 1

; Count of adjacency entries

L\$PLB: .BLKW 1

; PLB address

L\$PAR: .BLKW 1

; PARAMETER TYPE

L\$SYL: .BLKW 1

; System line number

L\$LEN: .BLKW 1

; LENGTH OF CONTEXT AREA

.PSECT

OFFSETS INTO SCRATCH BUFFER (L\$SCR) FOR DML BASE TABLE COUNTERS

000124  
 000000  
 000001

.ASECT

= 0

B\$5: .BLKB 1

; BASE TABLE + 5

B\$6: .BLKB 1

; BASE TABLE + 6

DACOU      CREATED BY MACRO ON 29-JUN-85 AT 12:21      PAGE 6      N 8

MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME      REFERENCES

|        |       |
|--------|-------|
| .X2CHB | #5-56 |
| .X2CHW | #5-56 |
| .X3CHB | #5-56 |
| .X3CHW | #5-56 |



DCPCOU - READ/AND OR ZERO DCP C MACRO V05.03b Saturday 29-Jun-85 <sup>N 9</sup> 12:21 Page 10-3  
Symbol table

Work file reads: 0  
Work file writes: 0  
Size of work file: 16020 Words ( 63 Pages)  
Size of core pool: 17608 Words ( 67 Pages)  
Operating system: RSX-11M/PLUS

Elapsed time: 00:00:22.31  
SY:DCPCOU.V2,[135,134]DCPCOU/CR/-SP=SY:[1,1]RSXMCM.SML/ML,[130,110]NETLIB/ML,[130,10]RSXMCM/PA:1,[135,10]DCPCOU

DEALUN      CREATED BY    MACRO    ON 29-JUN-85 AT 17:42      PAGE 2      N 10

MACRO CROSS REFERENCE      CREF    04.00

MACRO NAME      REFERENCES

|         |       |      |
|---------|-------|------|
| CALL    | 6-77  |      |
| HDRDF\$ | #5-62 | 5-63 |
| MAP     | #5-60 |      |
| RESMAP  | #5-60 |      |
| RETURN  | 6-103 |      |
| SAVMAP  | #5-60 |      |
| SWSTK\$ | 6-77  |      |

```

283                                     .SLITL COPY - Copy data from LDB to message buffer
284                                     ;+
285                                     ;**COPY - Copy data from LDB to message buffer
286                                     ;
287                                     ;Inputs:      R0 = target address
288                                     ;              R1 = byte count
289                                     ;              R5 = CCB address
290                                     ;
291                                     ;Output:       R0 = address of next free byte in buffer
292                                     ;
293                                     ;Registers:    R1 is corrupted.
294                                     ;-
295
296 000664 COPY:
297 000664 SAVMAP                                ;; Save mapping context
298 000670 SAVRG <R2>                          ;; Free up a register
299 000672 MAP C.BUF1(R5)                      ;; Map to returned data
300 000700 016502 000016 MOV C.BUF1+2(R5),R2  ;; Point to returned data
301 000704 BIAS R2                             ;; use APR 6 bias
302 000714 112220 10$: MOVB (R2)+,(R0)+      ;; Move data
303 000716 SOB R1,10$                          ;;
304 000722 RESRG <R2>                          ;; Restore saved register
305 000724 RESMAP                             ;; Restore mapping
306 000730 RETURN
307

```

DLMCOU - READ/AND OR ZERO DLM C MACRO V05.03b Saturday 29-Jun-85 N 12  
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|                 |                |                |                 |                  |
|-----------------|----------------|----------------|-----------------|------------------|
| MP\$MHO 001633  | MP\$PMC 004374 | MP\$TLO 000172 | MT\$ASC 000100  | MX\$SNK 000377   |
| MP\$MLB 000202  | MP\$PNT 002126 | MP\$TPA 004375 | MT\$BIL 000001  | MX\$TYP 000077   |
| MP\$MLK 001306  | MP\$PRI 004411 | MP\$TRI 002164 | MT\$BYS 000011  | MX\$UID 000020   |
| MP\$MLN 001631  | MP\$PRO 002130 | MP\$TST 000144 | MT\$CI 000007   | M\$SCRB= 000124  |
| MP\$MLP 006333  | MP\$PSS 001763 | MP\$TYP 002130 | MT\$CLE 000077  | M\$SCRX= 000000  |
| MP\$MRB 002171  | MP\$PST 001762 | MP\$UCS 004407 | MT\$COD 000200  | M\$SFCS= 000000  |
| MP\$MRP 001605  | MP\$RET 001631 | MP\$USR 001750 | MT\$CON 000001  | M\$SMGE= 000000  |
| MP\$MRP 006322  | MP\$RFA 001323 | MP\$VEC 004410 | MT\$DMC 000004  | M\$SNET= 000000  |
| MP\$MRT 002153  | MP\$RMX 002201 | MP\$VER 004406 | MT\$ETH 000006  | M\$SOVR= 000000  |
| MP\$MRV 006320  | MP\$RPA 004374 | MP\$WDF 002165 | MT\$HEX 000040  | NM. CLN 003400   |
| MP\$MSB 000170  | MP\$RPR 001606 | MP\$WMX 002177 | MT\$LPB 000005  | NM. INI 002400   |
| MP\$MVE 000145  | MP\$RRT 002213 | MP\$XMT 002166 | MT\$MAX 000037  | NM. OPR 003000   |
| MP\$MVI 001634  | MP\$RST 002212 | MP\$XPF 000242 | MT\$MUL 000100  | NM. VR2 002401   |
| MP\$MVR 001751  | MP\$RSV 001754 | MP\$XPL 000244 | MT\$NLE 000017  | NM. VR3 002402   |
| MP\$MWN 002154  | MP\$RSZ 001756 | MP\$XPT 000240 | MT\$NON 000001  | N\$SACC= 000001  |
| MP\$MXB 002172  | MP\$RTI 001616 | MP\$XXX 177777 | MT\$NR4 000005  | N\$SBUF= 000001  |
| MP\$MXC 000466  | MP\$RTM 001611 | MP\$YST 004406 | MT\$NTY 000060  | N\$SLDV= 000001  |
| MP\$MXR 001630  | MP\$RVE 001604 | M\$SACT 000001 | MT\$OCT 000060  | N\$SMCP= 000001  |
| MP\$MXW 002143  | MP\$RVT 000156 | M\$SADU 000010 | MT\$PHA 000002  | N\$SMML= 000001  |
| MP\$NAA 006335  | MP\$SAC 000514 | M\$SALO 000007 | MT\$POI 000000  | N\$SMOV= 000010  |
| MP\$NAC 001130  | MP\$SAD 000543 | M\$SASE 000006 | MT\$QPP 000010  | N\$SNCT= 000001  |
| MP\$NAP 006326  | MP\$SCA 000310 | M\$SATR 000011 | MT\$RJU 000000  | N\$SPEM= 000001  |
| MP\$NCT 000240  | MP\$SCO 000144 | M\$SAUT 000000 | MT\$RD4 000004  | OC\$ACK= 000001  |
| MP\$NET 002114  | MP\$SCT 002176 | M\$SCLE 000003 | MT\$SEC 000000  | OC\$ACHD 000012  |
| MP\$NLI 000765  | MP\$SDU 000203 | M\$SDED 000004 | MT\$SGD 000020  | OC\$ALQ 000016   |
| MP\$NNA 000764  | MP\$SDV 000160 | M\$SDIE 000003 | MT\$SGY 000002  | OC\$CLK 000000   |
| MP\$NOD 000500  | MP\$SEH 004401 | M\$SDUM 000004 | MT\$STER 000001 | OC\$CNTL 000003  |
| MP\$NRA 006334  | MP\$SER 000144 | M\$SFAI 000013 | MT\$TRI 000002  | OS\$LENG 000022  |
| MP\$NRB 000214  | MP\$SET 000000 | M\$SGLO 000000 | MT\$TYP 007777  | OS\$LINE 000004  |
| MP\$NSA 001617  | MP\$SGZ 001644 | M\$SHOL 000002 | MT\$USD 000000  | OSTRHD 000006    |
| MP\$NTI 002141  | MP\$SID 000176 | M\$SHNA 000002 | MT\$X25 000003  | OSWCT 000002     |
| MP\$NUM 001642  | MP\$SIN 000310 | M\$SLOA 000003 | MUSINC 000001   | PDVID = ***** GX |
| MP\$NVE 001274  | MP\$SLI 000156 | M\$SLOO 000002 | MUSOUT 000002   | P\$SP45= 000000  |
| MP\$NXN= 001476 | MP\$SLO 000171 | M\$SOFF 000001 | MUSPER 000000   | P\$SWRD= 000000  |
| MP\$OAC 000632  | MP\$SMX 002202 | M\$SON 000000  | MV\$III 000000  | QC\$ACK= 000004  |
| MP\$OAN 000620  | MP\$SND 000500 | M\$SPRO 000006 | MV\$IV 000001   | QC\$ACT= 000004  |
| MP\$OCO 000776  | MP\$SNP 006332 | M\$SREA 000004 | MX\$ACT 000020  | QC\$CIP= 000001  |
| MP\$OHO 000214  | MP\$SNU 000542 | M\$SREF 000001 | MX\$CIR 000020  | QC\$ENB= 000001  |
| MP\$ONA 000764  | MP\$SUB 000524 | M\$SRES 000003 | MX\$CLN 000020  | QC\$STP= 000002  |
| MP\$ONR 002114  | MP\$SPA 000157 | M\$SRST 000001 | MX\$CNM 000006  | QC\$SVC= 000002  |
| MP\$OQL 001453  | MP\$SPR 000536 | M\$SRSX 000002 | MX\$CON 000006  | QF\$EXT= 000377  |
| MP\$OTI 000777  | MP\$SPS 000513 | M\$SRT 000005  | MX\$DAC 000020  | QF\$FAS= 000001  |
| MP\$OTY 001022  | MP\$STA 000000 | M\$SER 000002  | MX\$DTE 000020  | QF\$NRS= 000144  |
| MP\$OUS 000775  | MP\$STI 002140 | M\$SSHU 000002 | MX\$DIL 000034  | QF\$PKS= 000102  |
| MP\$OVE 001010  | MP\$STT 002201 | M\$SSRV 000007 | MX\$LGC 000777  | QF\$RRS= 000300  |
| MP\$OWN 004374  | MP\$STY 000175 | M\$SSTA 000000 | MX\$LIN 000020  | QF\$TFC= 000002  |
| MP\$PAR 000036  | MP\$SUB 000001 | M\$SSYN 000012 | MX\$LOD 000006  | QF\$WSZ= 000103  |
| MP\$PAS 000513  | MP\$SUR 000156 | M\$STER 000001 | MX\$NMS 000454  | Q\$SACT= 000016  |
| MP\$PCI 002152  | MP\$SUS 000512 | M\$STOP 000003 | MX\$NOD 000006  | Q\$SAPV= 000002  |
| MP\$PCO 000242  | MP\$SVR 000163 | M\$STRI 000005 | MX\$OBJ 000006  | Q\$SCCO= 000030  |
| MP\$PCT 000144  | MP\$SWI 002260 | M\$SUNR 000005 | MX\$OWN 000040  | Q\$SCLC= 000022  |
| MP\$PDT 002114  | MP\$STP 002424 | M\$SVMS 000004 | MX\$PAR 000036  | Q\$SCLR= 000026  |
| MP\$PHA 000170  | MP\$TFL 000156 | MS. DON 177600 | MX\$PAS 000010  | Q\$SCRO= 000004  |
| MP\$PHY 000012  | MP\$TH1 002206 | MS. MOR 000002 | MX\$RAC 000047  | Q\$SCRV= 000020  |
| MP\$PLI 000025  | MP\$TH2 002205 | MS. PAR 000003 | MX\$RID 000047  | Q\$SCWC= 000024  |
| MP\$PLN 002140  | MP\$TH3 002202 | MS. SUC 000001 | MX\$RPS 000047  | Q\$SDAT= 000000  |
| MP\$PLO 000012  | MP\$TLN 000202 | MT\$AR4 000003 | MX\$SID 000040  | Q\$SDPV= 000032  |

```

000002      LP$TRB = 2      ; TRIBUTARY NUMBER FOUND
000004      LP$MUX = 4      ; DEVICE IS MUX
000010      LP$MPT = 10     ; LINE IS MULTIPOINT
000020      LP$WDV = 20     ; WILD CARD DEVICE NAME FOUND
000040      LP$WCN = 40     ; WILD CARD CONTROLLER NUMBER FOUND
000100      LP$WUN = 100    ; WILD CARD UNIT NUMBER FOUND
000200      LP$WTR = 200    ; WILD CARD TRIBUTARY NUMBER FOUND
000360      LP$WLD = LP$WDV!LP$WCN!LP$WUN!LP$WTR ; WILD CARD FIELD MASK
  
```

;; FLAGS WORD BIT DEFINITIONS (L\$FLG)

```

000001      L$NNTL=1      ; NTL SET FUNCTION
000002      L$NSTA=2      ; SET STATE
000004      L$SCOS=4      ; SET COST
000010      L$SDWN=10     ; SET OWNER
000020      L$STAD=20     ; SET TRIBUTARY ADDRESS
000040      L$SACT=40     ; SET MULTIPOINT ACTIVE
000100      L$SDEA=100    ; SET MULTIPOINT DEAD
000200      L$CNTL=200    ; NTL CLEAR FUNCTION
000400      L$COWN=400    ; CLEAR OWNER
001000      L$DDT=1000    ; SET DEAD TIMER
002000      L$DLT=2000    ; SET DELAY TIMER
004000      L$PLT=4000    ; SET POLL TIMER
010000      L$BBT=10000   ; SET BABBLE TIMER
020000      L$NMT=20000   ; SET NORMAL TIMER
040000      L$XMT=40000   ; SET TRANSMIT TIMER
100000      L$SER=100000  ; SET SERVICE [ENABLE/DISABLE]
  
```

;; FLAGS WORD BIT DEFINITIONS (L\$FL1)

```

000001      L$BSA=1      ; SET ACTIVE BASE
000002      L$BSD=2      ; SET DYING BASE
000004      L$BSI=4      ; SET INACTIVE BASE
000010      L$INA=10     ; SET ACTIVE INCREMENT
000020      L$IND=20     ; SET DYING INCREMENT
000040      L$INI=40     ; SET INACTIVE INCREMENT
000100      L$TH1=100    ; SET DEAD THRESHOLD
000200      L$TH2=200    ; SET DYING THRESHOLD
000400      L$TH3=400    ; SET INACTIVE THRESHOLD
001000      L$MXB=1000   ; SET MAXIMUM BLOCKS
010000      L$HTM=10000  ; SET HELLO TIMER
020000      L$MDT=20000  ; SET MODEM TEST
040000      L$LLO=40000  ; SET CONTROLLER LOOPBACK
100000      L$NOR=100000 ; SET CONTROLLER NORMAL
      .IF DF R$PRO ; PRO/DECNET
  
```

;; LOOPBACK TYPE WORD BIT DEFINITIONS (L\$LTy)

```

      L$INT = 0      ; INTERNAL LOOPBACK
      L$EXT = 1      ; EXTERNAL LOOPBACK
  
```

;; MODEM TEST TYPE WORD BIT DEFINITIONS (L\$MDT)

```

      L$LCL = 0      ; LOCAL MODEM TEST
      L$REM = 1      ; REMOTE MODEM TEST
      L$OFF = 2      ; SHUT OFF MODEM TESTS
      .ENDC ; DF R$PRO
  
```

♦♦FILE♦♦ID♦♦DLXAST

```

DDDDDDDD LL XX XX AAAAAA SSSSSSSS TTTTTTTTTT
DDDDDDDD LL XX XX AAAAAA SSSSSSSS TTTTTTTTTT
DD DD LL XX XX AA AA SS TT
DD DD LL XX XX AA AA SS TT
DD DD LL XX XX AA AA SS TT
DD DD LL XX XX AA AA SS TT
DD DD LL XX XX AA AA SSSSSS TT
DD DD LL XX XX AA AA SSSSSS TT
DD DD LL XX XX AA AA SSSSSS TT
DD DD LL XX XX AA AA SSSSSS TT
DD DD LL XX XX AA AA SSSSSS TT
DD DD LL XX XX AA AA SSSSSS TT
DDDDDDDD LLLLLLLLLL XX XX AA AA SSSSSSSS TT
DDDDDDDD LLLLLLLLLL XX XX AA AA SSSSSSSS TT

```

```

LL          SSSSSSSS  TTTT TTTT TTTT
LL          SSSSSSSS  TTTT TTTT TTTT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SSSSSS    TT
LL          SSSSSS    TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SS        TT
LL          SSSSSSSS  TT
LLLLLLLLLLL SSSSSSSS  TT
LLLLLLLLLLL SSSSSSSS  TT

```

